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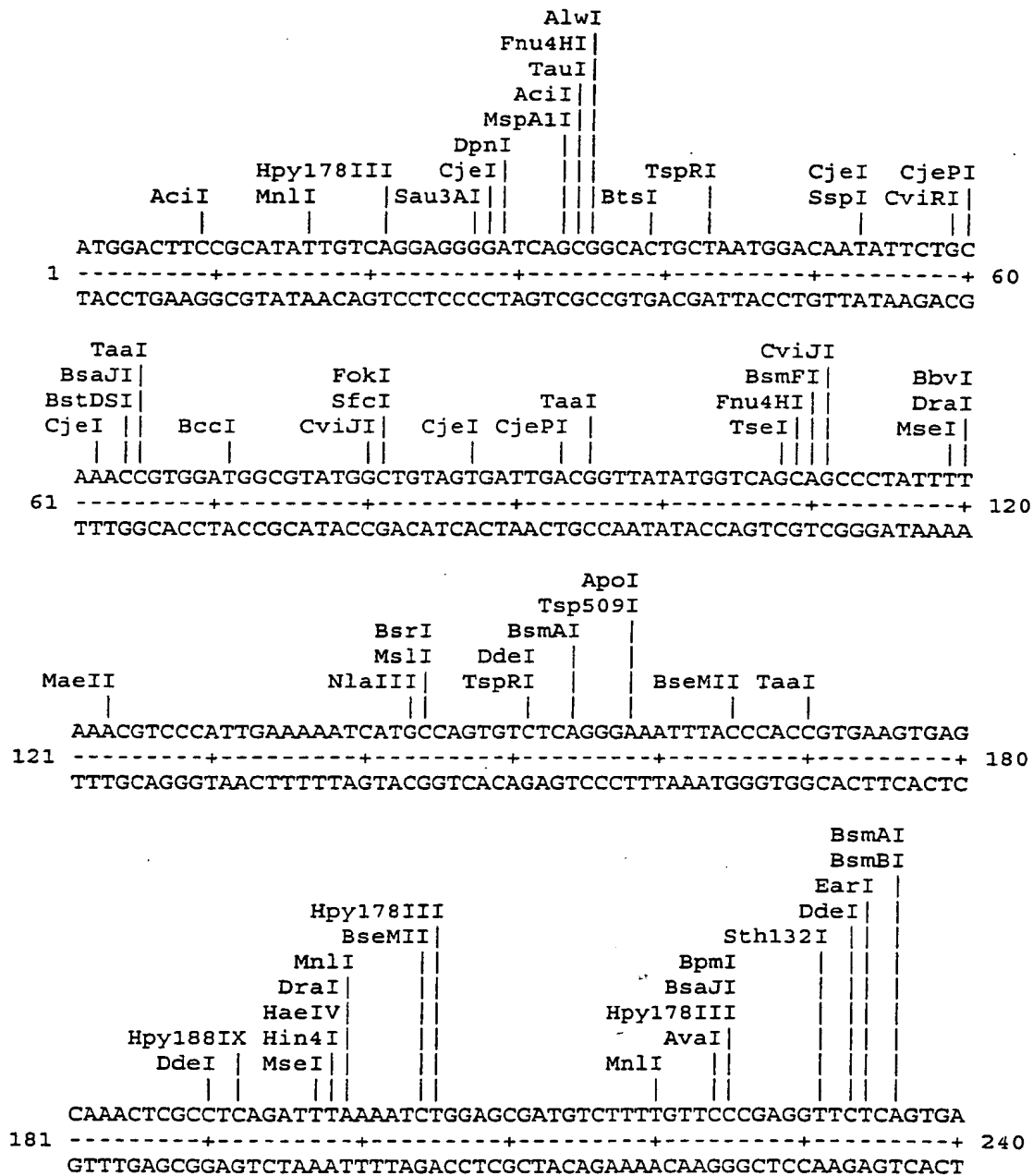
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Figure 1

Restriction enzyme analysis of CPN100686 (RY 54 - SEQ ID NO. 1)



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Figure 1 (Continued)

DpnI
 EarI |
 Sau3AI |
 Hpy188IX | |
 MboII | | |
 DpnI | | | |
 BseMII | | | |
 Hin4I | | | |
 Sau3AI | | | |
 MboII | | | |
 TspRI | | | | | BplI | RsaI |
 | | | | | | | | | BsrGI |
 | | | | | | | | | TatI |
 AGAGACGATCTCTTCTGATCTTGGGAAAAACAATGTACACAAGGCATTATCTCAGCATG
 241 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 300
 TCTCTGCTAGAGAAGACTAGAACCCCTTTTTGTTACATGTGTTCCGTAATAGAGTCGTAC

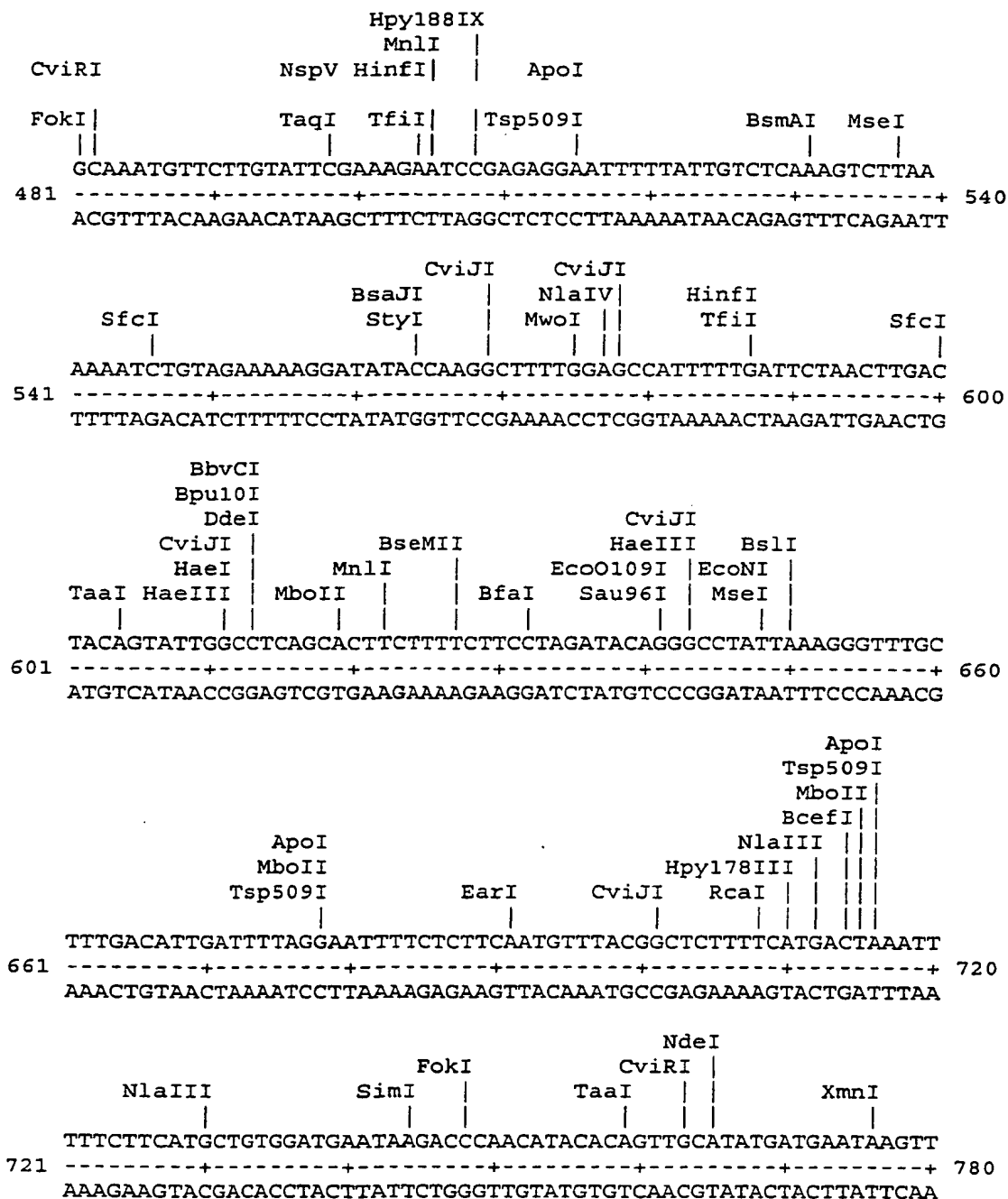
 BseMII |
 CviJI | BsrDI |
 | |
 CTGTGGCTTGGCAATGCTTATTGTTTTGATGAGCGTATATTATAGATTTGGAGGCGTCAT
 301 -----+-----+-----+-----+-----+-----+-----+-----+-----+ 360
 GACACCGAACCGTTACGAATAACAAACTACTCGCATATAATATCTAAACCTCCGCAGTA

 AluI |
 CviJI |
 MboII | Hinfi |
 MwoI | TfiI |
 Hpy178III | Hpy188IX |
 | | |
 CGCTTCGGGAGCTGTTCTTCTGAATCTTTTGCTTATCTGGGCAGCTCTACAGTATTTGGA
 361 -----+-----+-----+-----+-----+-----+-----+-----+-----+ 420
 GCGAAGCCCTCGACAAGAAGACTTAGAAAACGAATAGACCCGTCGAGATGTCATAAACCT

 HinfI |
 Hpy178III |
 PleI | |
 HhaI | CjeI | |
 HphI | FokI | | |
 | | | | |
 TGCGCCACTCACCTTGTCAGGACTCGCTGGGATTGTTCTTGCTATGGGGATGGCCGTCAGTA
 421 -----+-----+-----+-----+-----+-----+-----+-----+-----+ 480
 ACCGCGTGAGTGGAACAGTCCTGAGCGACCCTAACAAGAACGATACCCCTACCGGCATCT

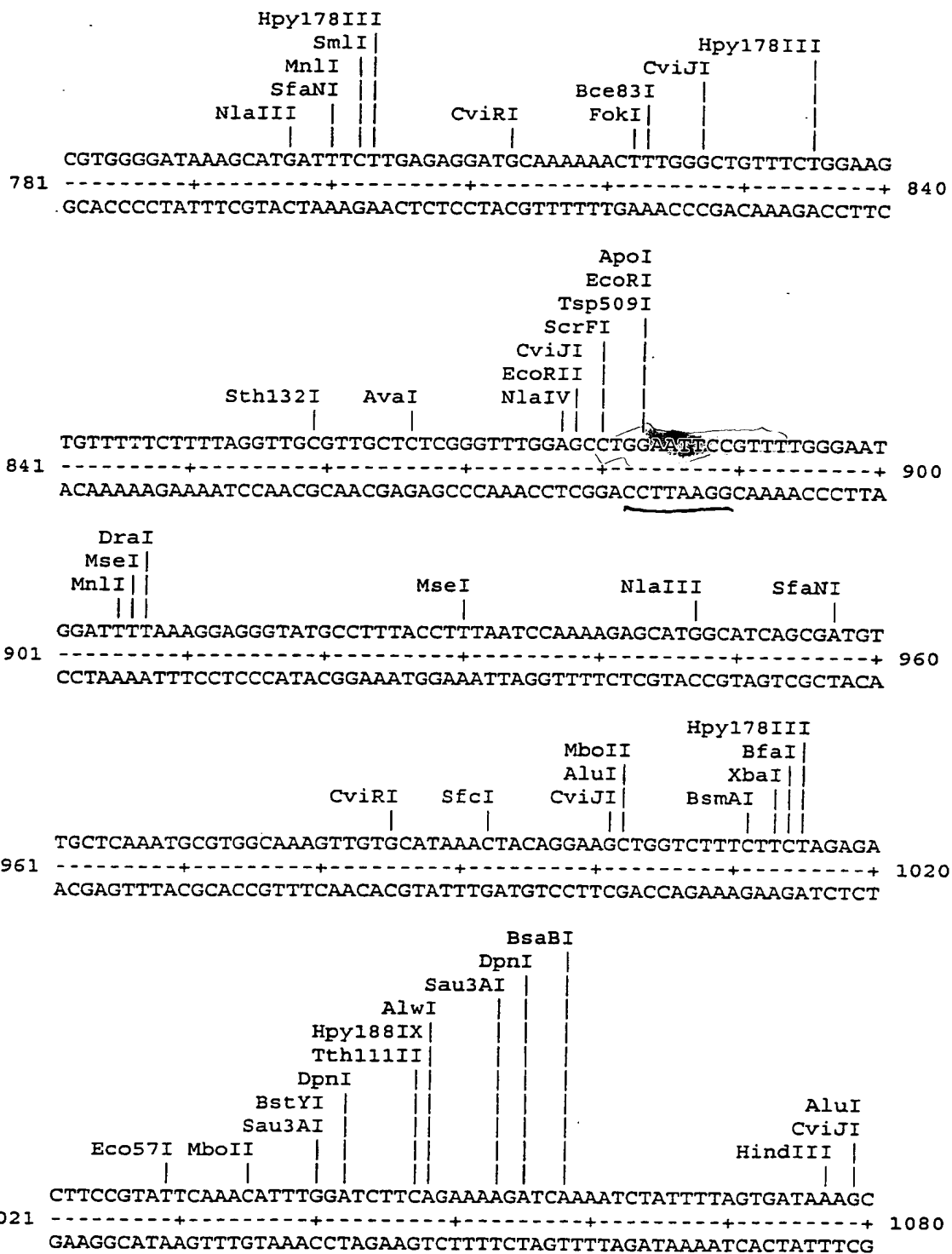
3/96

Figure 1 (continued)



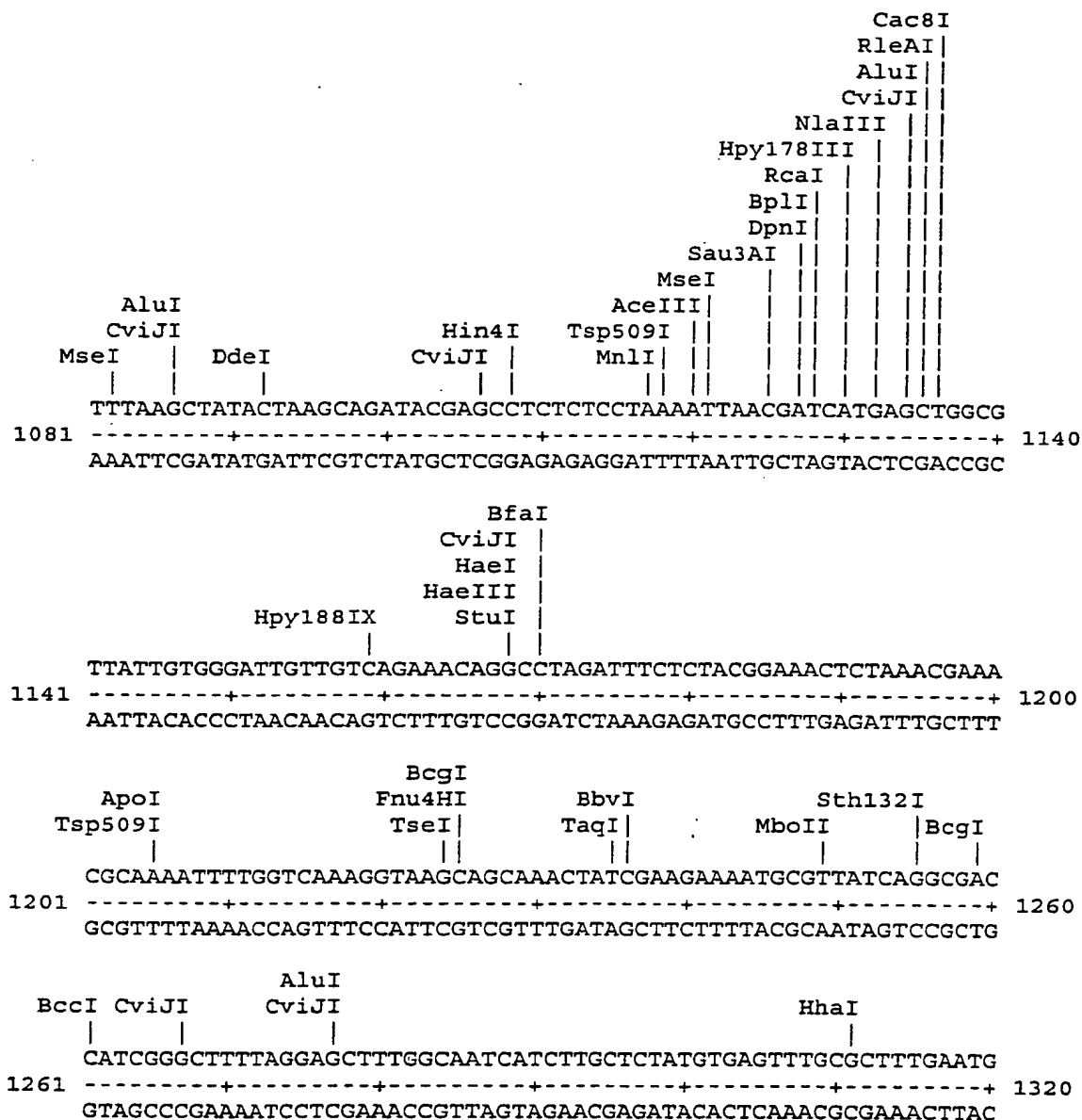
4/96

Figure 1 (continued)



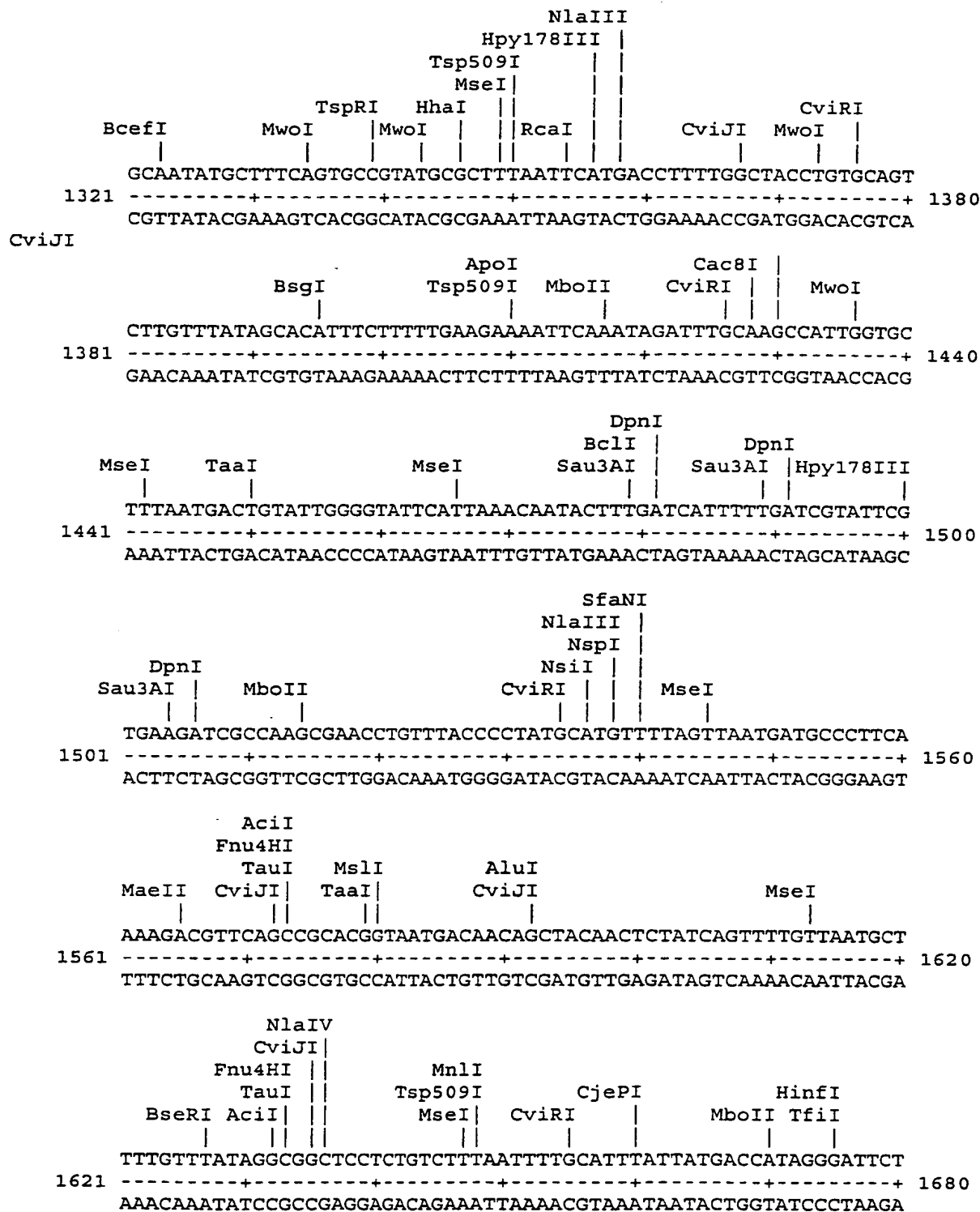
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Figure 1 (continued)



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Figure 1 (continued)



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Figure 1 (continued)

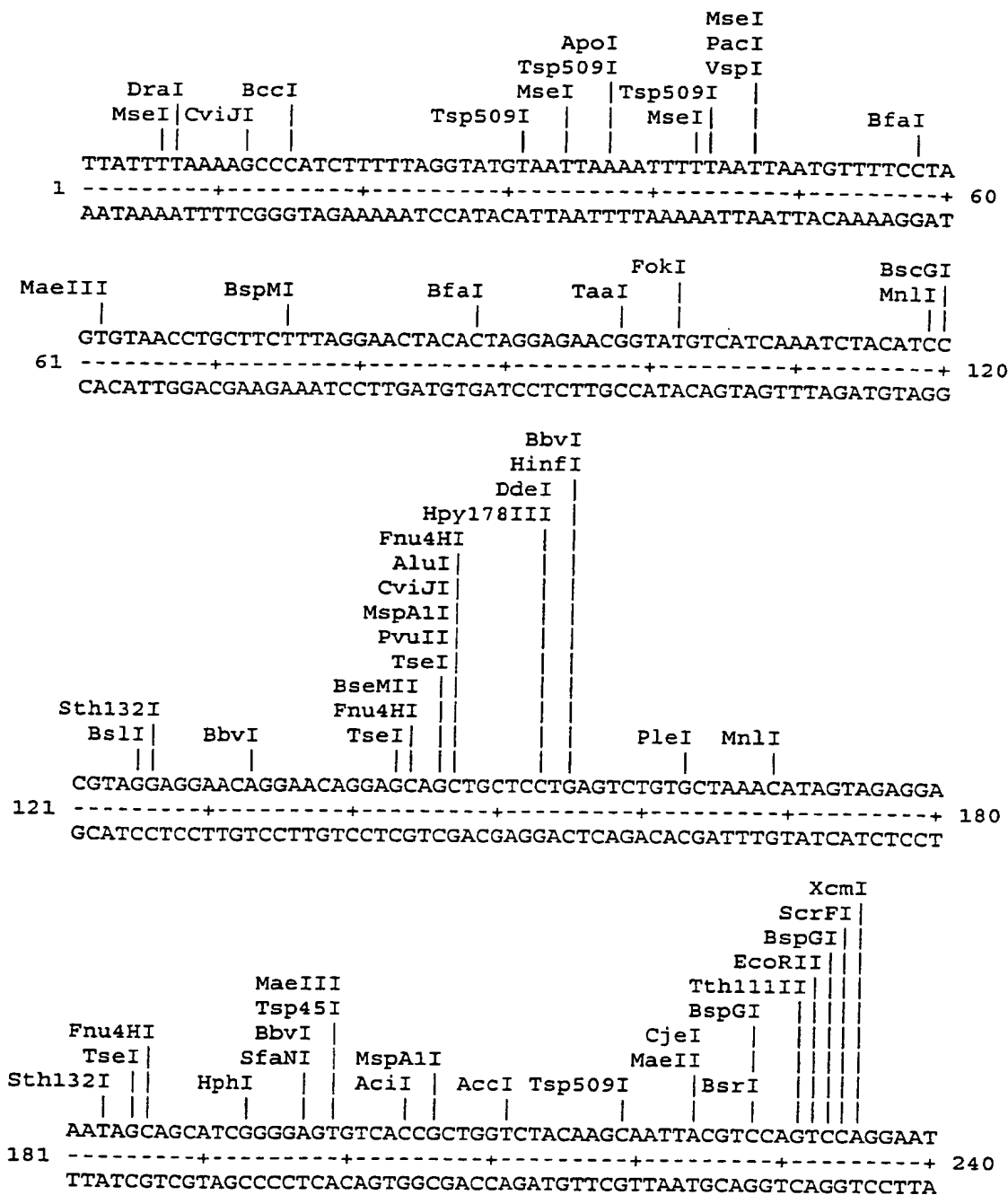
BfaI CjePI BsmAI BsmBI CviRI MnlI Sau96I AvaII
 | | | | | | |
 TCTAGGAACTTTATCGTCTCTTTATATTGCACCACCTCTGTTGTTGTTTATGGTCCGTAA
 1681 -----+-----+-----+-----+-----+-----+-----+ 1740
 AGATCCTTGAAATAGCAGAGAAATATAACGTGGTGGAGACAACAACAAATACCAGGCATT
 MseI
 TaaI AflIII
 | | |
 RsaI MseI MaeII
 AGAAAATCGCTCAAATAAGTACCGTTAACTTAATCTAACGTGTAGCAATATAAAAATC
 1741 -----+-----+-----+-----+-----+-----+-----+ 1800
 TCTTTTAGCGAGTTTTATTTCATGGCAATTTGAATTAGATTGCACATCGTTATATTTTAG
 NlaIV
 CviJI
 HaeIII
 EcoO109I
 Sau96I
 BsmFI PshAI BsmFI ApoI Hpy188IX
 | | | | |
 Tsp509I MseI ApoI Tsp509I
 TCCTTTGGGACTTTAGTCCCAAAGGCCCTGTGGTATTAAATTTATGACAAATTCAGATA
 1801 -----+-----+-----+-----+-----+-----+-----+ 1860
 AGGAAACCCTGAAATCAGGGTTTCCGGGGACACCATAATTTAAATACTGTTTAAGTCTAT
 ATGC
 1861 ---- 1864
 TACG

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Figure 2

Restriction enzyme analysis of CPN100696 (RY 55 - SEQ ID NO. 2)



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Figure 2 (continued)

HinfI BccI ApoI HinfI
 TfiI HphI CjeI Tsp509I BsaAI TfiI
 | | | | | |
 GGTGAATCTACTCATAGGATGGGCAAAGACAAAATTTATTCAACCTATACGTGAATCAAA
 241 -----+-----+-----+-----+-----+-----+-----+ 300
 CCACTTAGATGAGTATCCTACCCGTTTCTGTTTAAATAAGTTGGATATGCACCTTAGTTT

 Tsp509I
 Cac8I
 AluI AluI ApoI
 CviJI CviJI EcoRI
 | | | |
 GCTCTTTCAATCCAGAGCTTGCCAAATTACCCTGCTCGTTTTAGGAATTCTTTTGGTTGT
 301 -----+-----+-----+-----+-----+-----+-----+ 360
 CGAGAAAGTTAGGTCTCGAACGGTTTAATGGGACGAGCAAATCCTTAAGAAAACCAACA

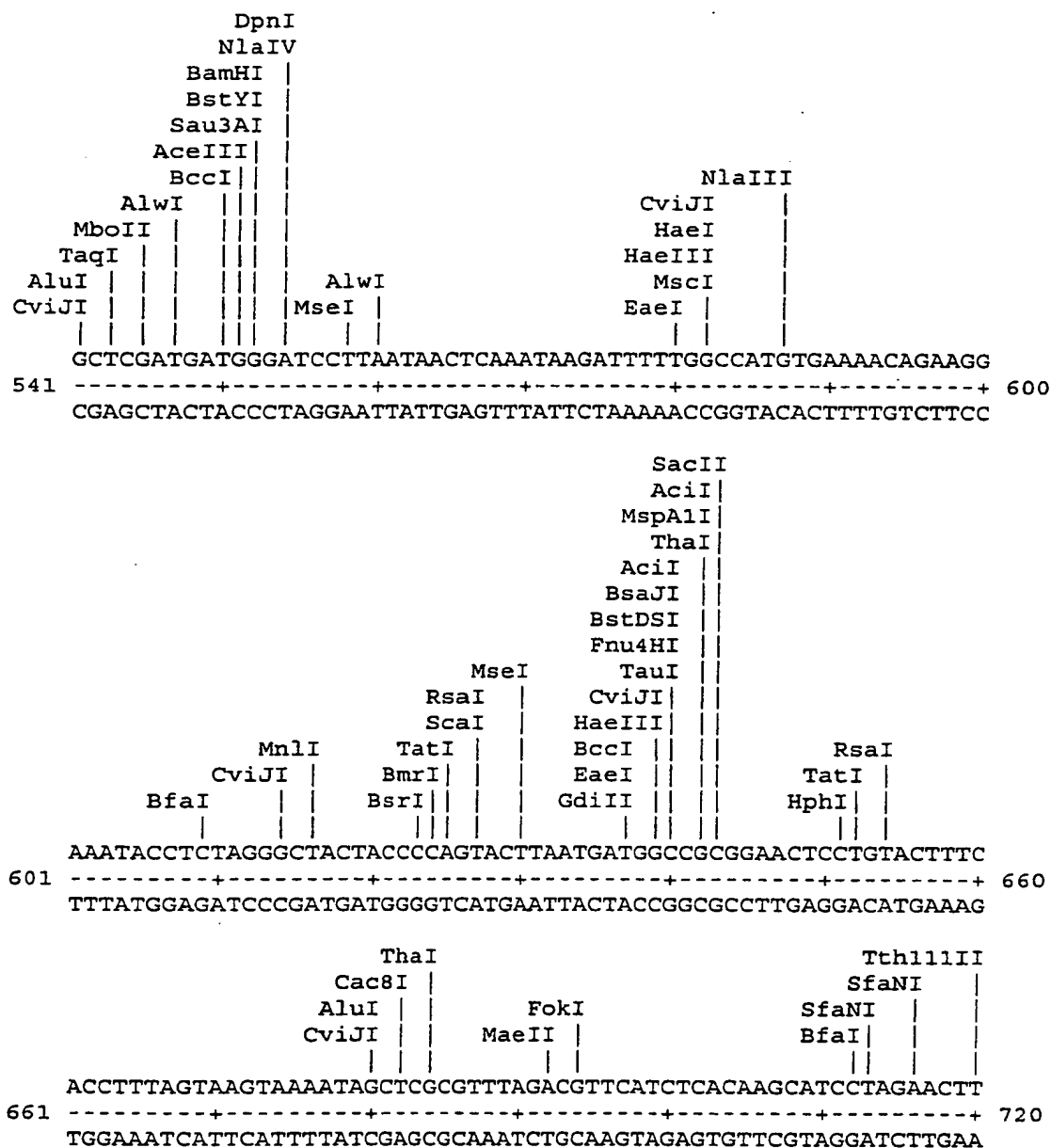
 CjeI
 MboII
 NlaIII
 CjePI | BsrI CjeI
 MwoI NspI CviJI BslI NsiI
 | | | | | |
 TGCTGGATTAGCATGTATGTTTATCTTCCATAGCCAGTTAGGGGCAAATGCATTTTGGTT
 361 -----+-----+-----+-----+-----+-----+-----+ 420
 ACGACCTAATCGTACATACAAATAGAAGGTATCGGTCAATCCCGTTTACGTAAAACCAA

 MaeIII
 Fnu4HI MaeIII BfaI MslI HindIII
 TseI MseI SpeI | |
 | | | | |
 GATTATTCCTGCTGCCATAGGATTGATTAAGTTACTAGTTACATCATTATGTTTTGATGA
 421 -----+-----+-----+-----+-----+-----+-----+ 480
 CTAATAAGGACGACGGTATCCTAACTAATTCAATGATCAATGTAGTAATACAAACTACT

Hpy188IX
 RsaI
 BsrGI | | | | |
 TatI | | | | |
 AluI | | | | |
 CviJI | | | | |
 | | | | | |
 AGCTTGTACATCTGAAAAACTCATGGTTTTCCAAAAATGGGCAGGTGTTTTAGAAGATCA
 481 -----+-----+-----+-----+-----+-----+-----+ 540
 TCGAACATGTAGACTTTTTGAGTACCAAAAGGTTTTTACCCGTCACAAAATCTTCTAGT

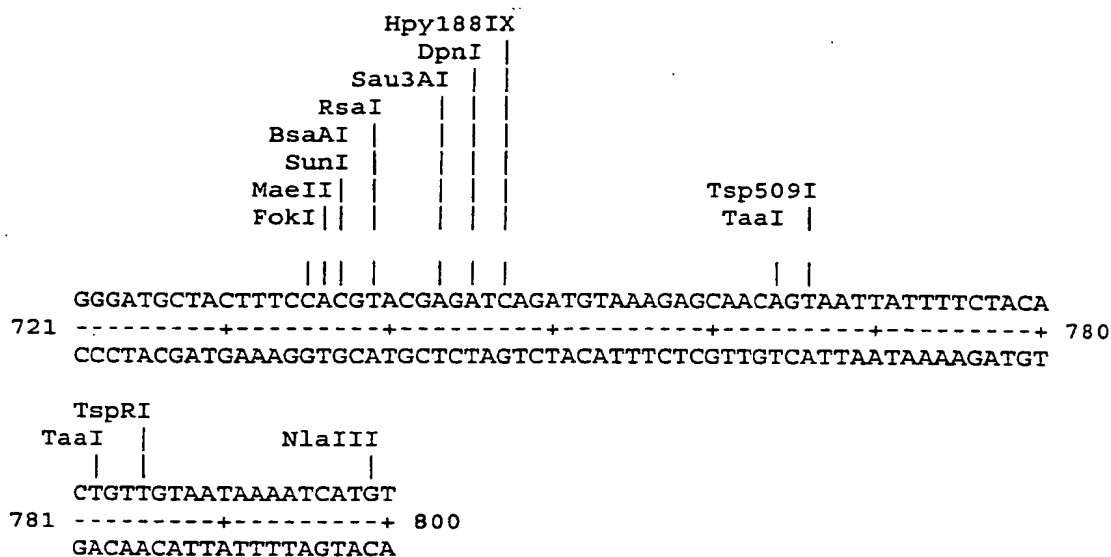
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Figure 2 (continued)



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Figure 2 (continued)

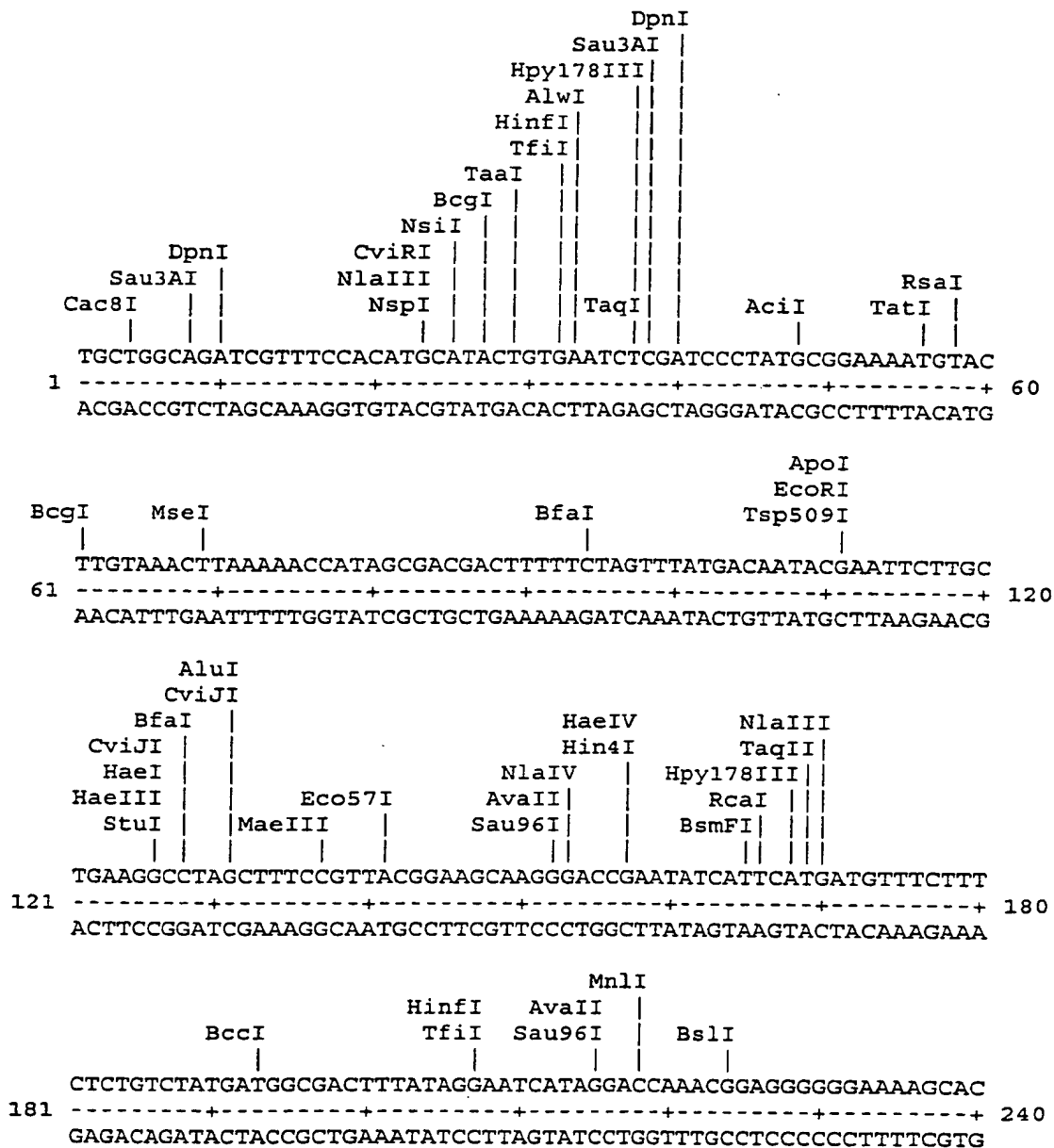


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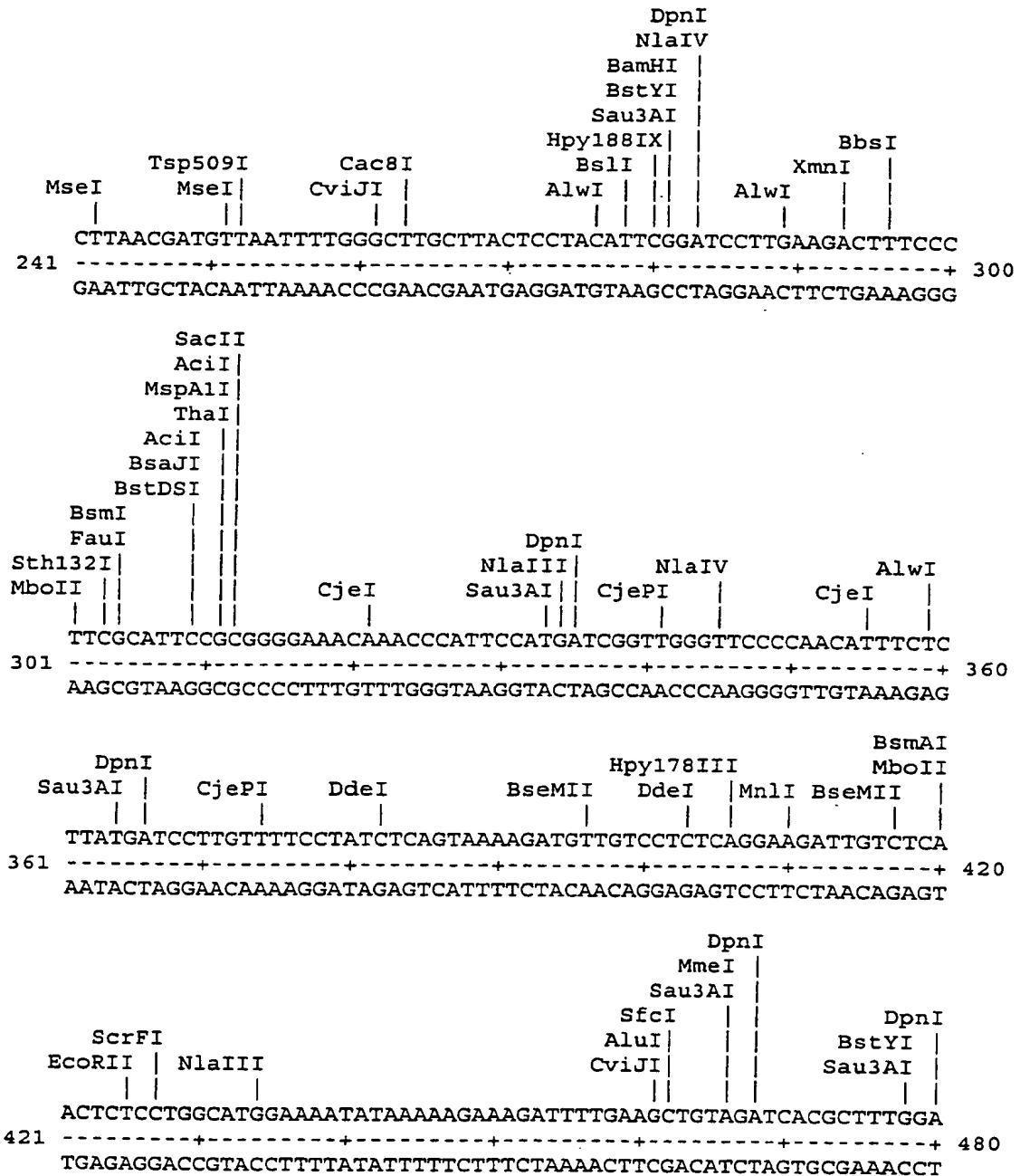
Figure 3

Restriction enzyme analysis of CPN100709 (RY 57 - SEQ ID NO. 3)



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Figure 3 (continued)



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Figure 3 (continued)

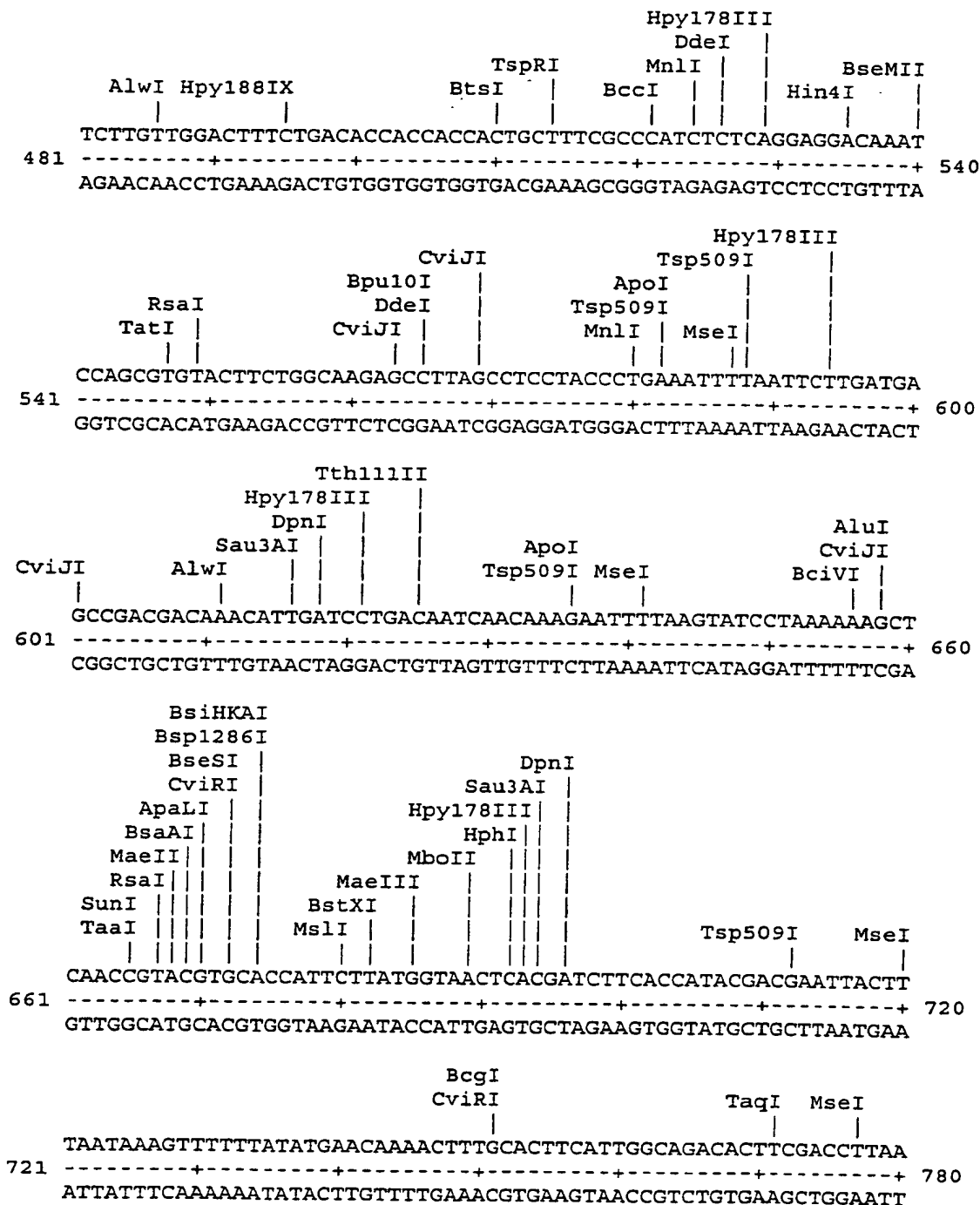
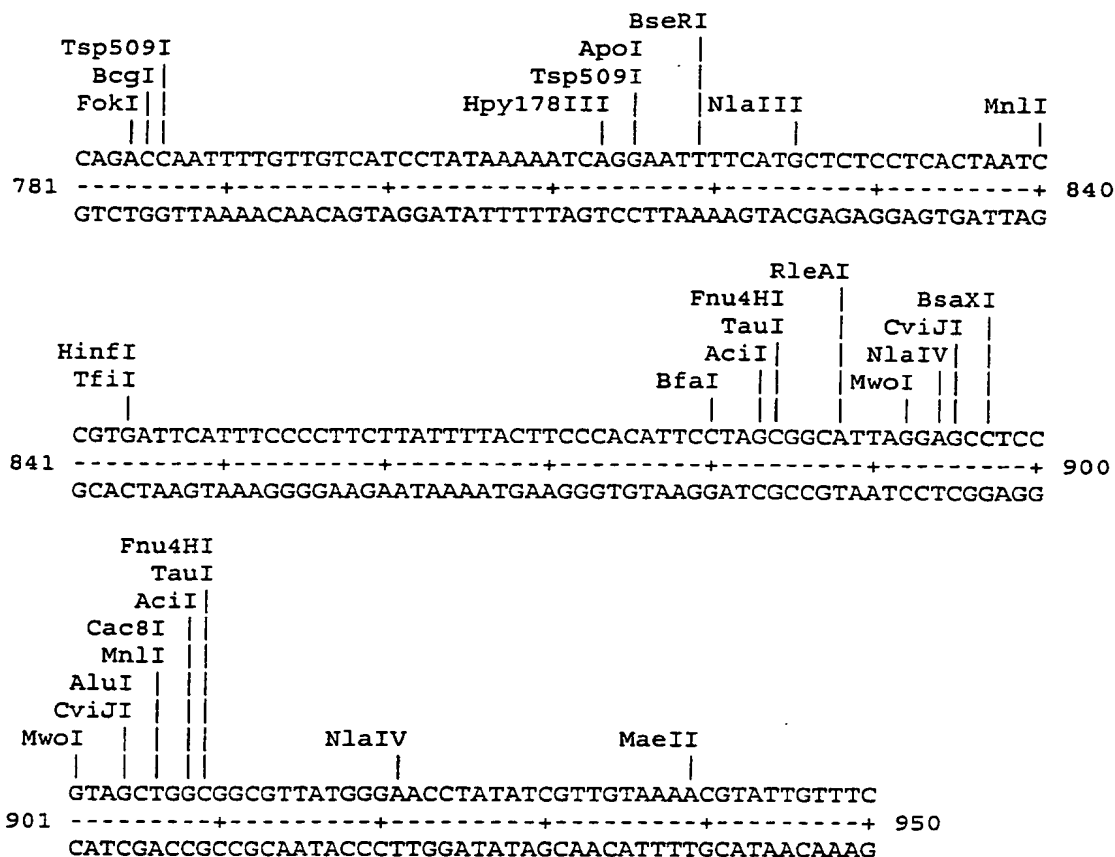


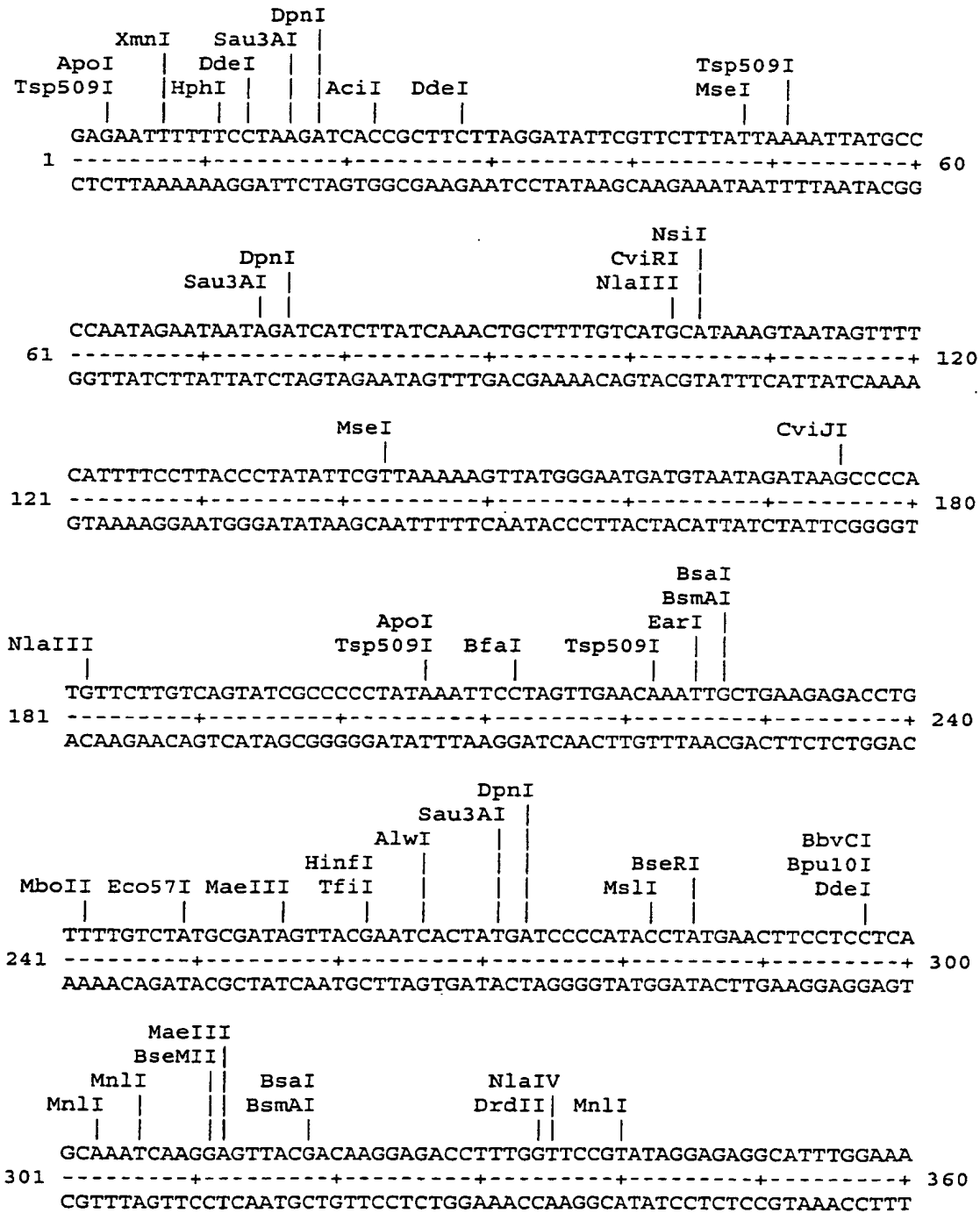
Figure 3 (continued)



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Figure 4

Restriction enzyme analysis of CPN100710 (RY 58 - SEQ ID NO. 4)



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Figure 4 (continued)

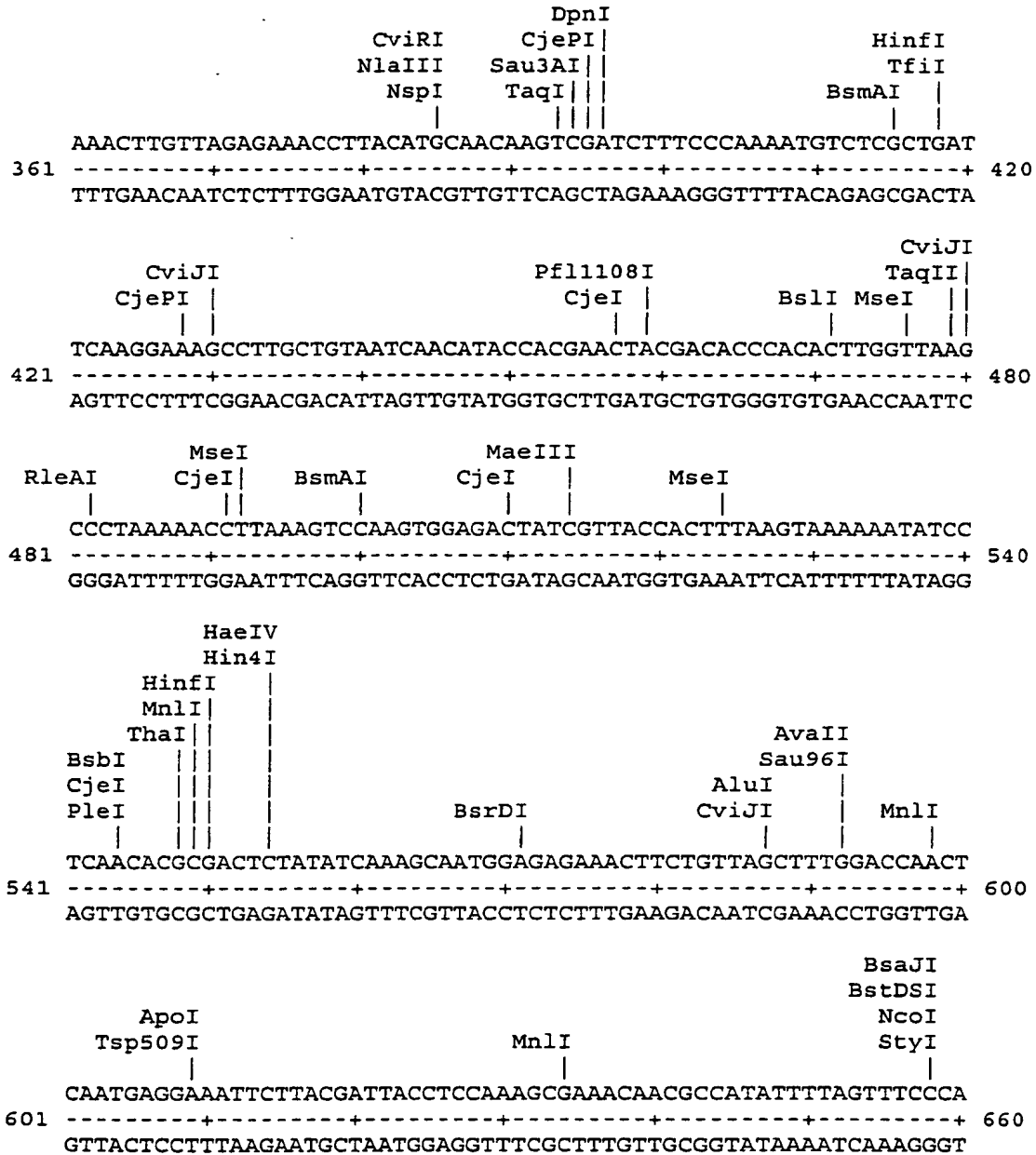


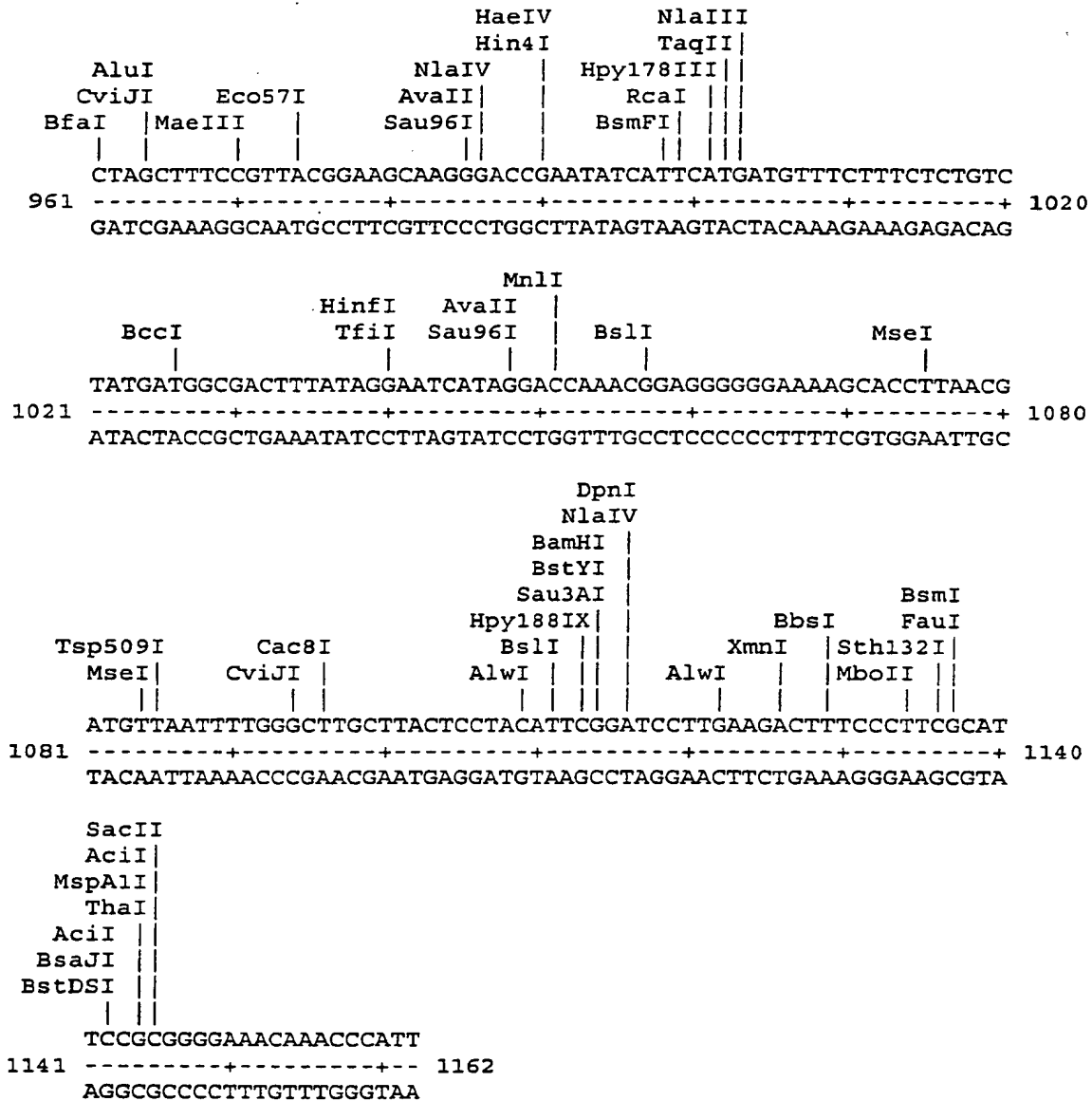
Figure 4 (continued)

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1. The first part of the document is a list of references. The references are listed in a vertical column on the left side of the page. The references are:

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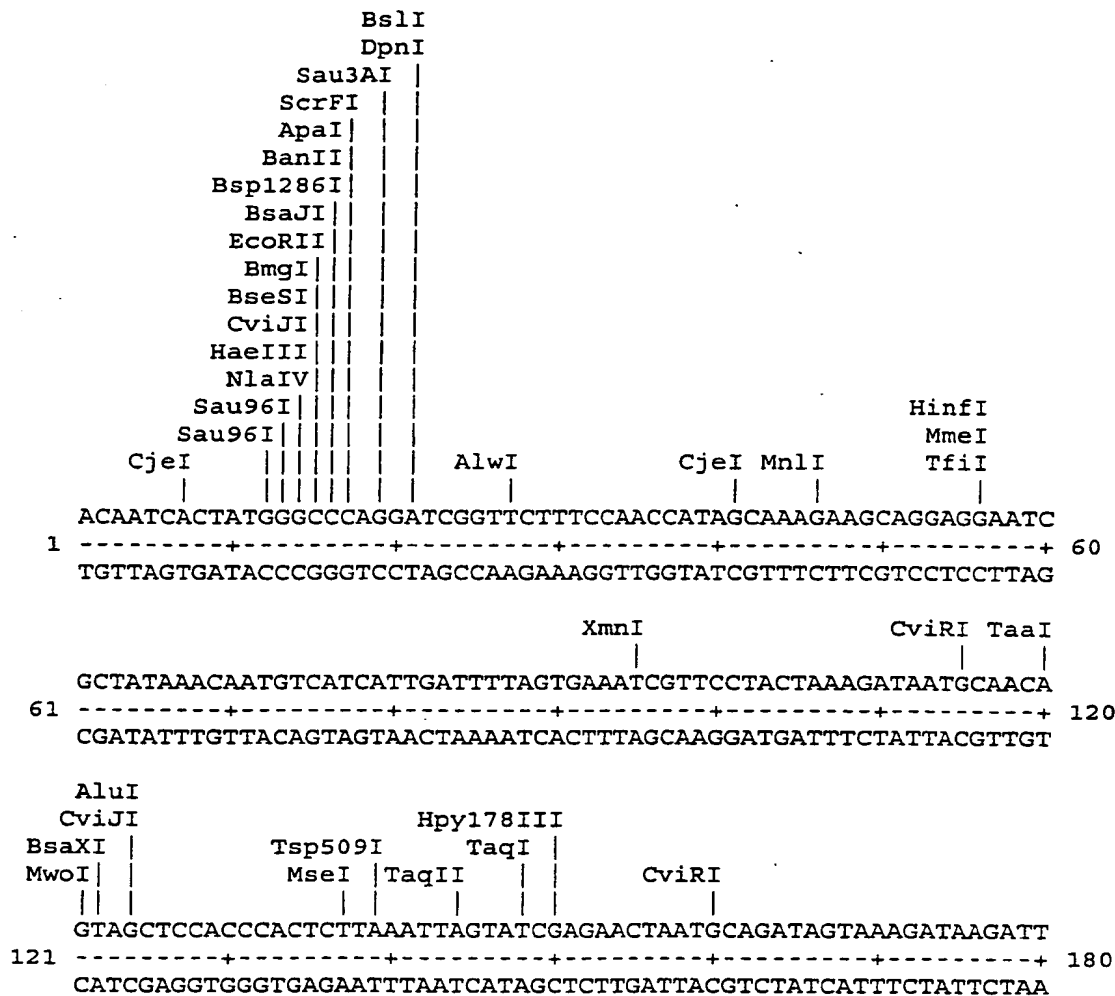
Figure 4 (continued)



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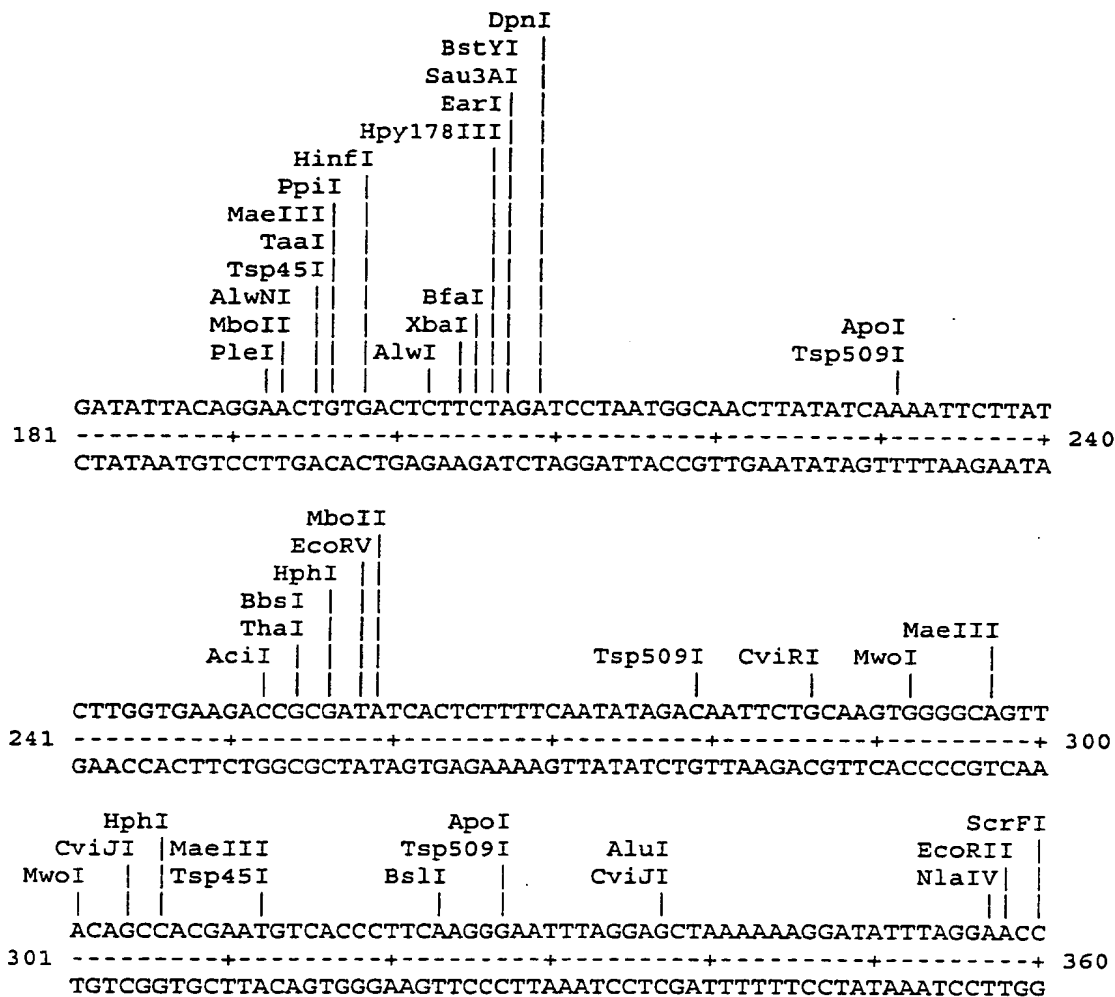
Figure 5

Restriction enzyme analysis of CPN100711 (RY 59 - SEQ ID NO. 5)



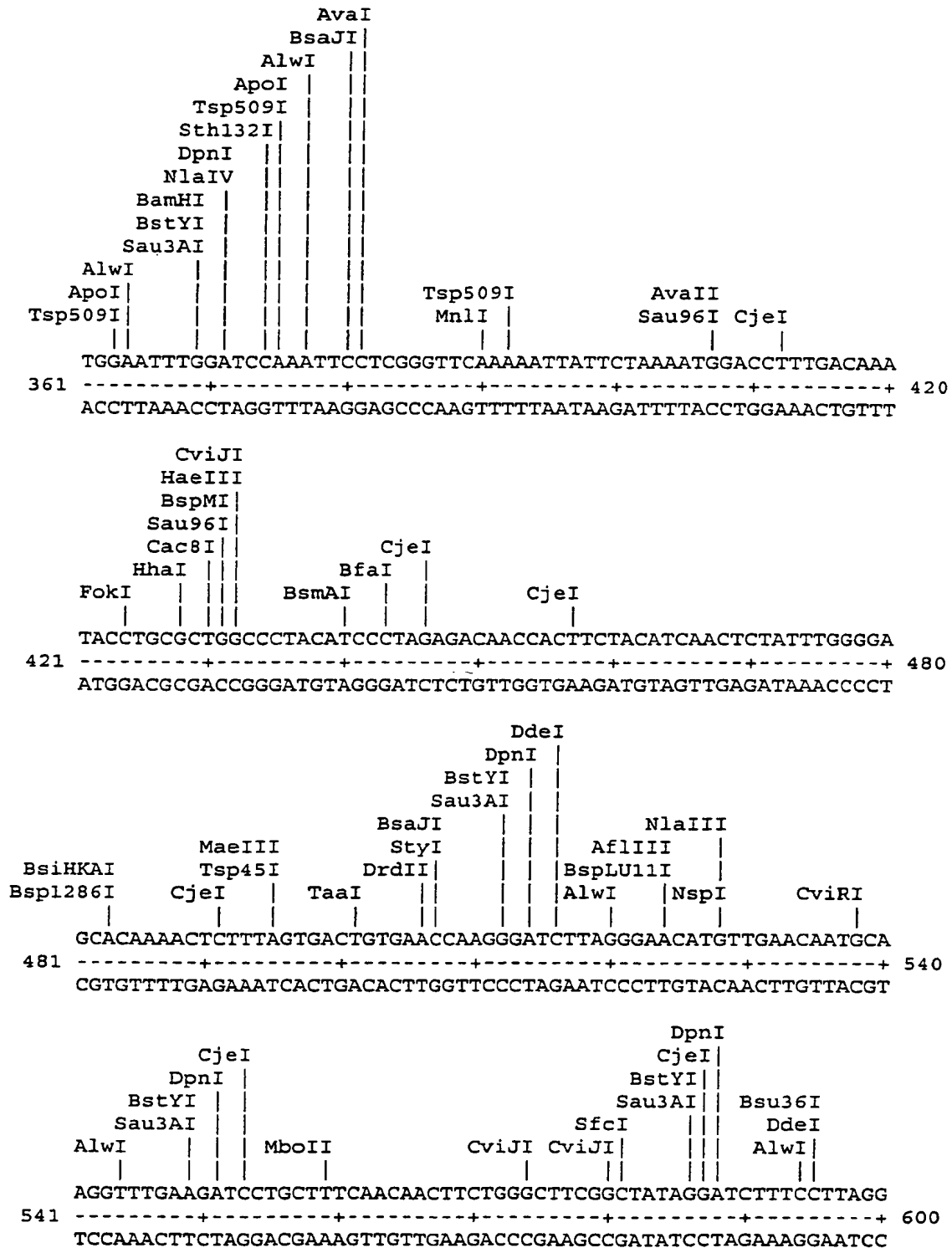
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Figure 5 (continued)



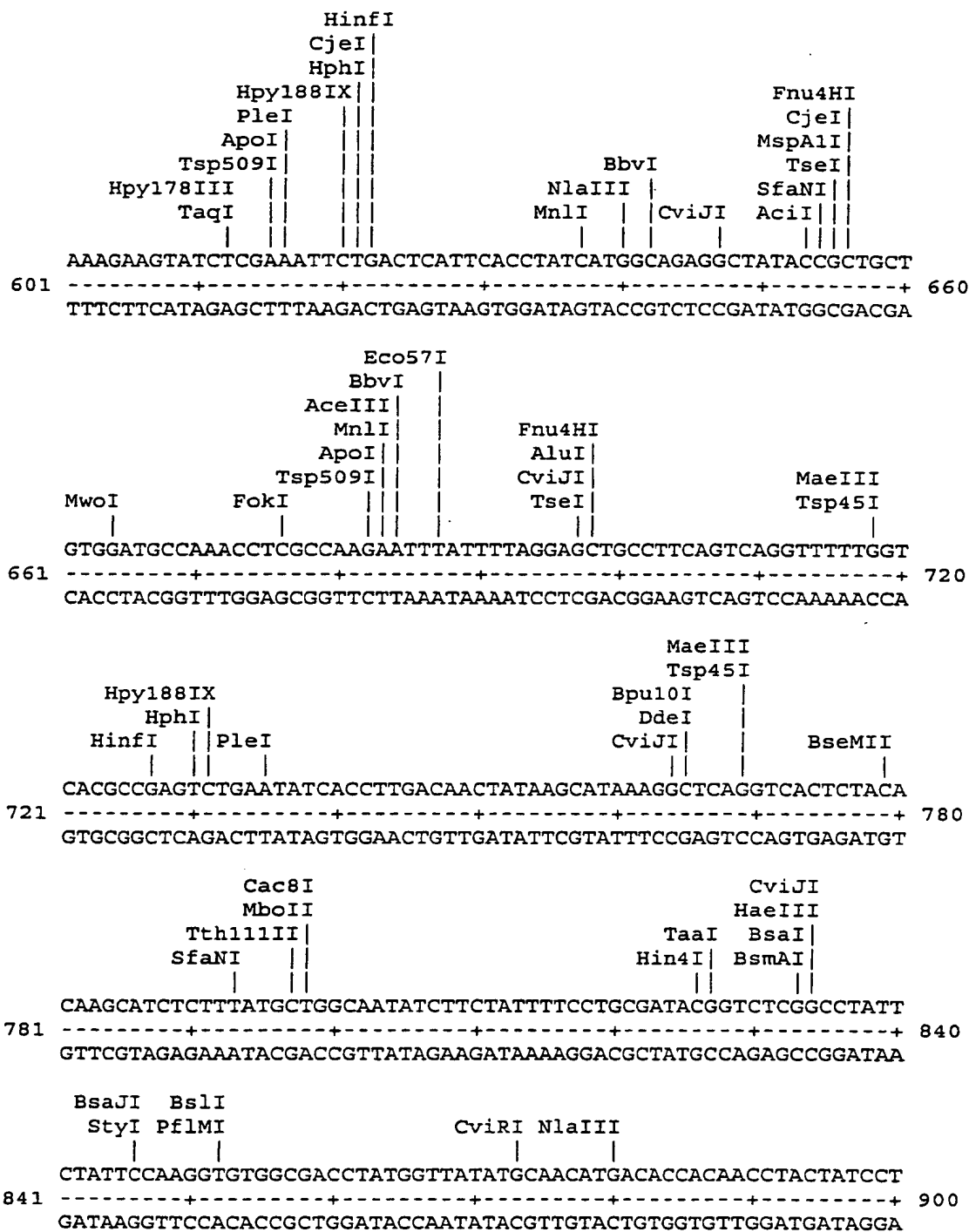
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Figure 5 (continued)



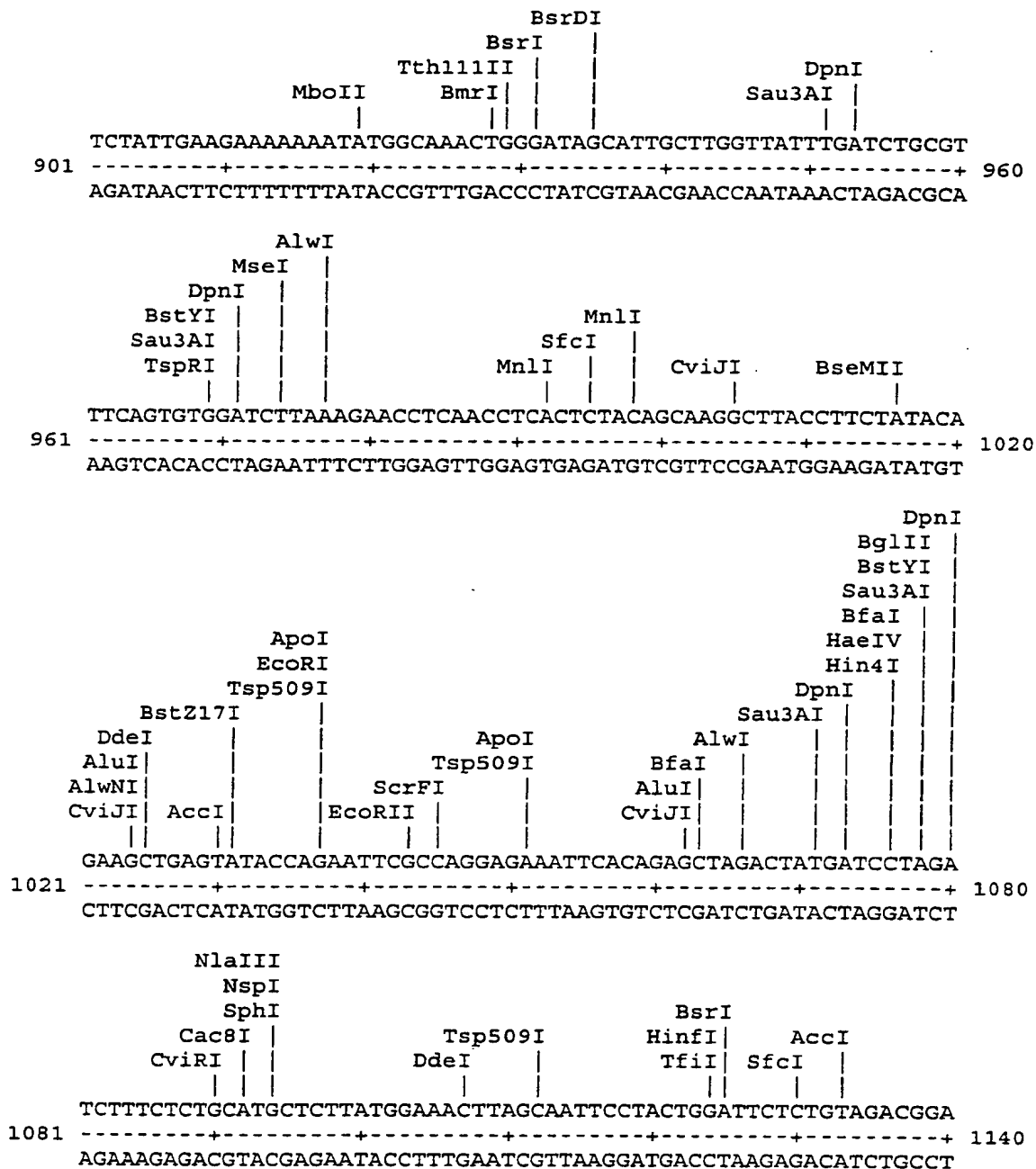
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Figure 5 (continued)



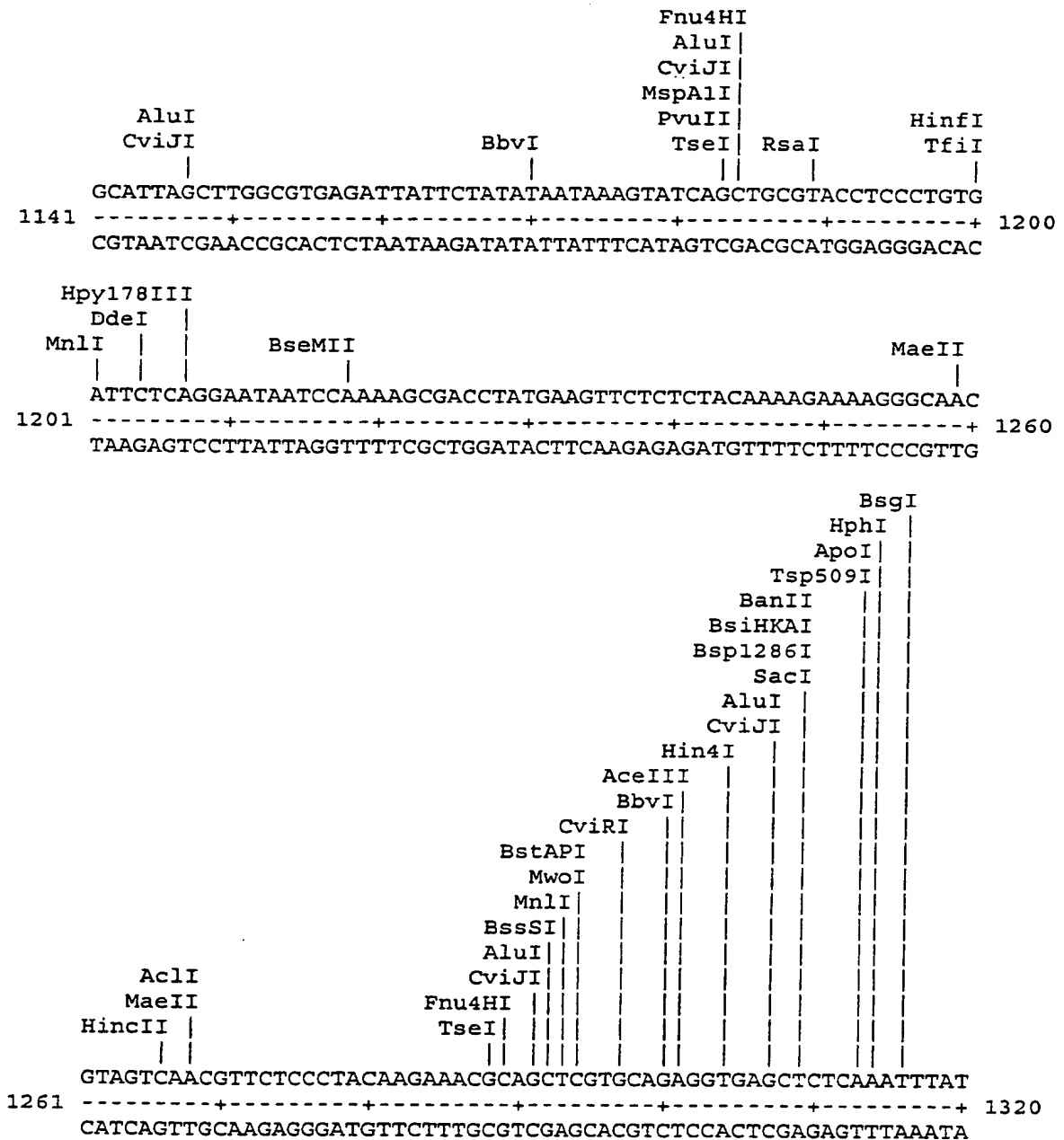
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Figure 5 (continued)



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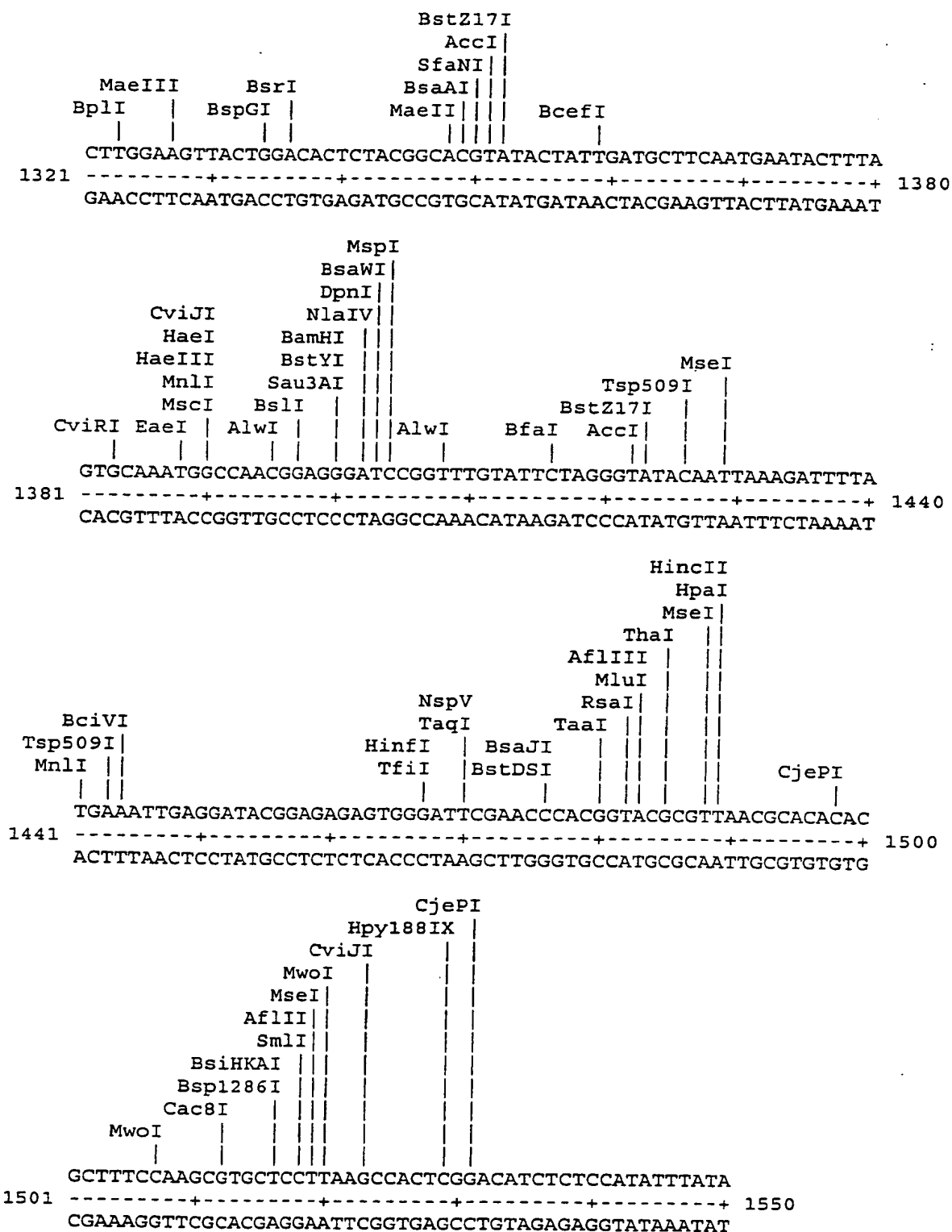
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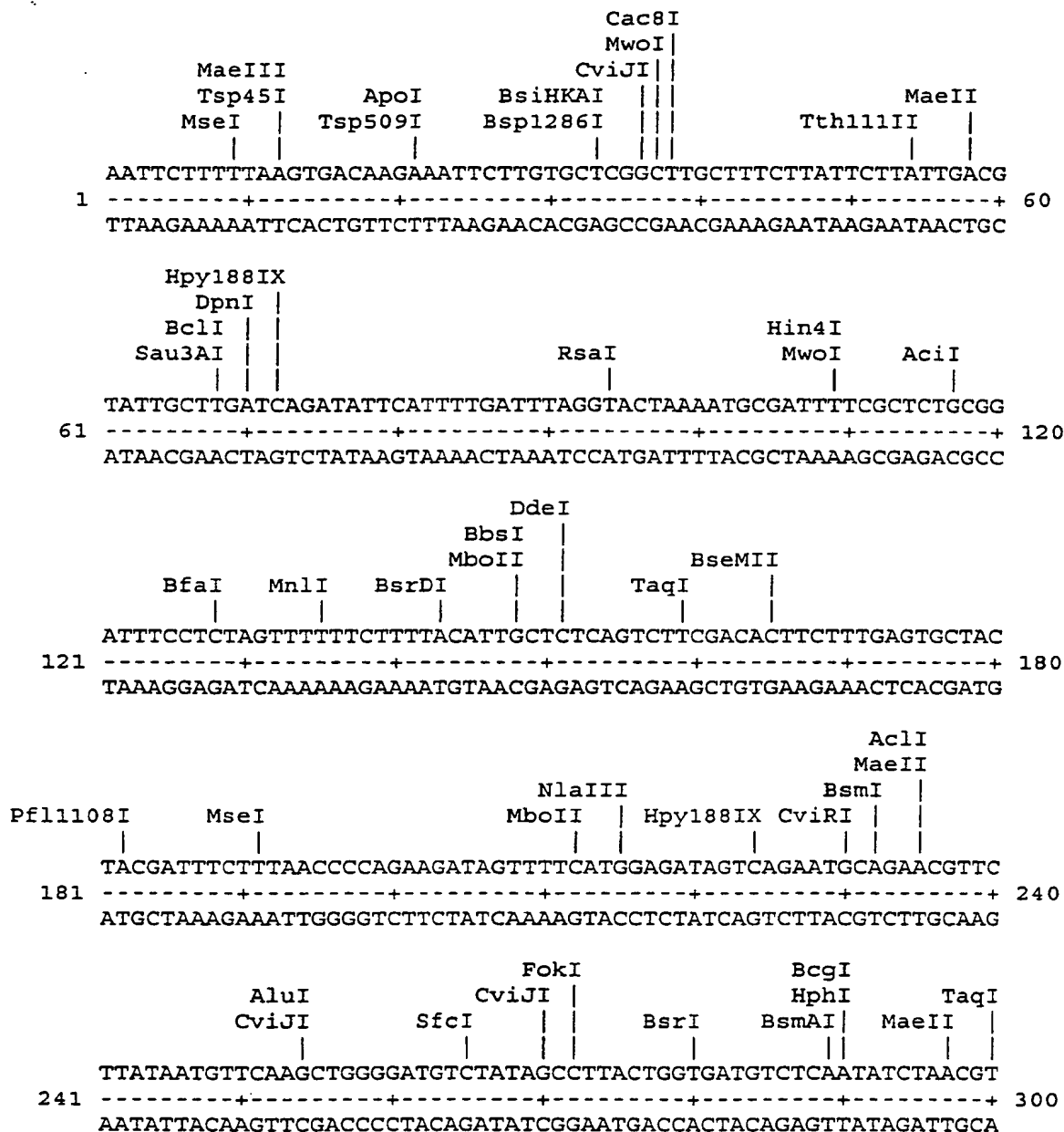
Figure 5 (continued)



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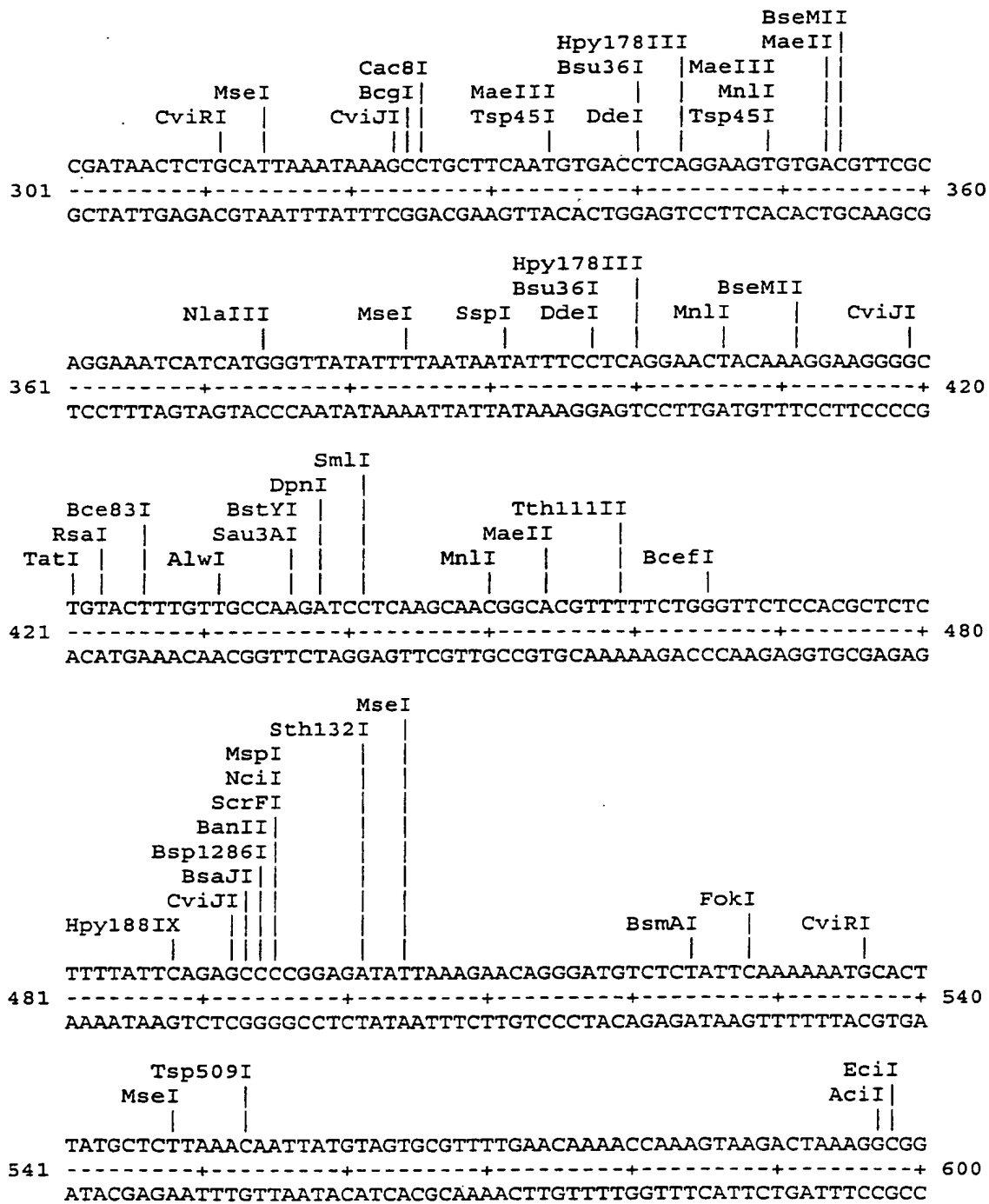
Figure 6

Restriction enzyme analysis of CPN100877 (RY 61 - SEQ ID NO. 6)



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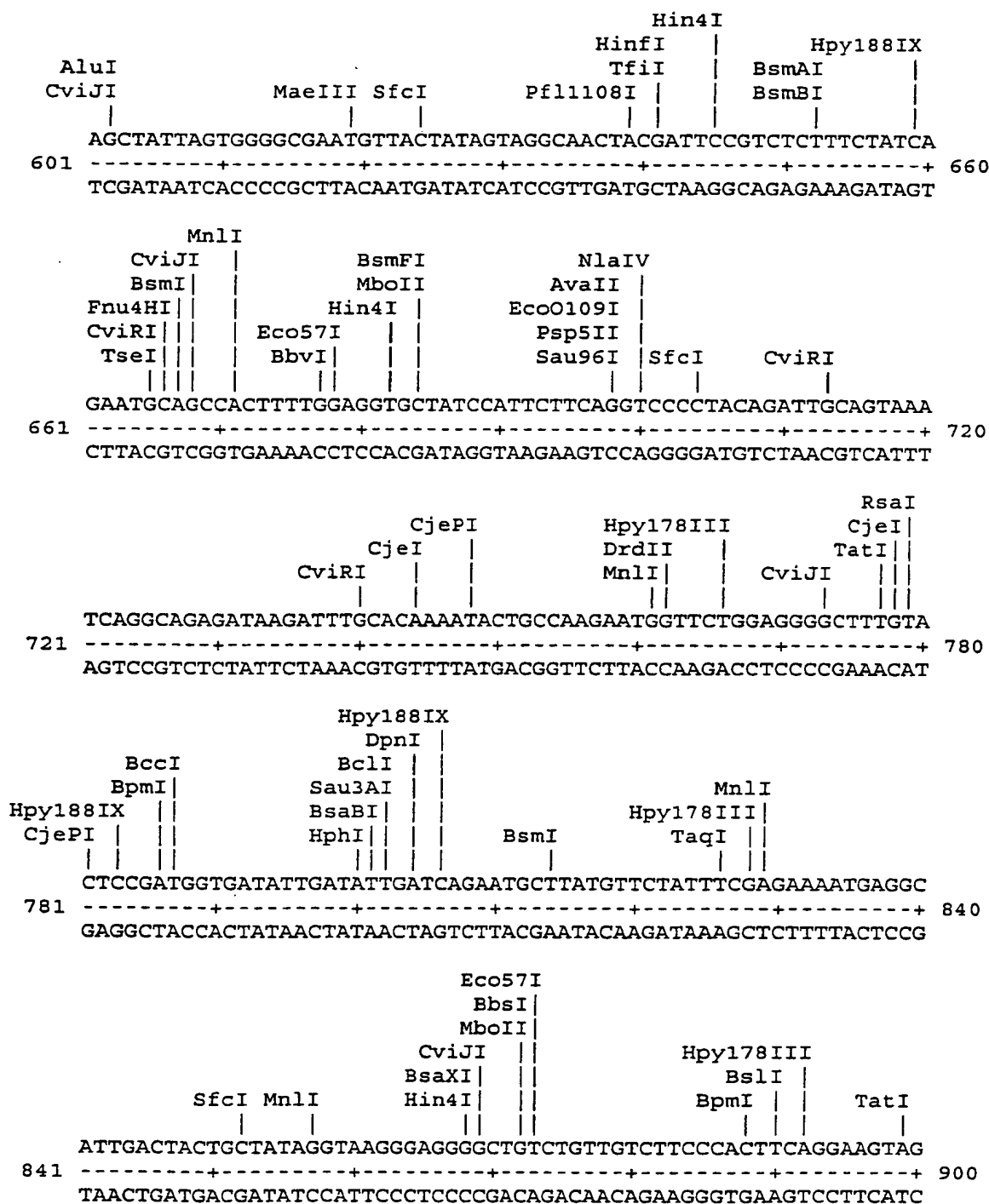
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006699 "10401" 2665660

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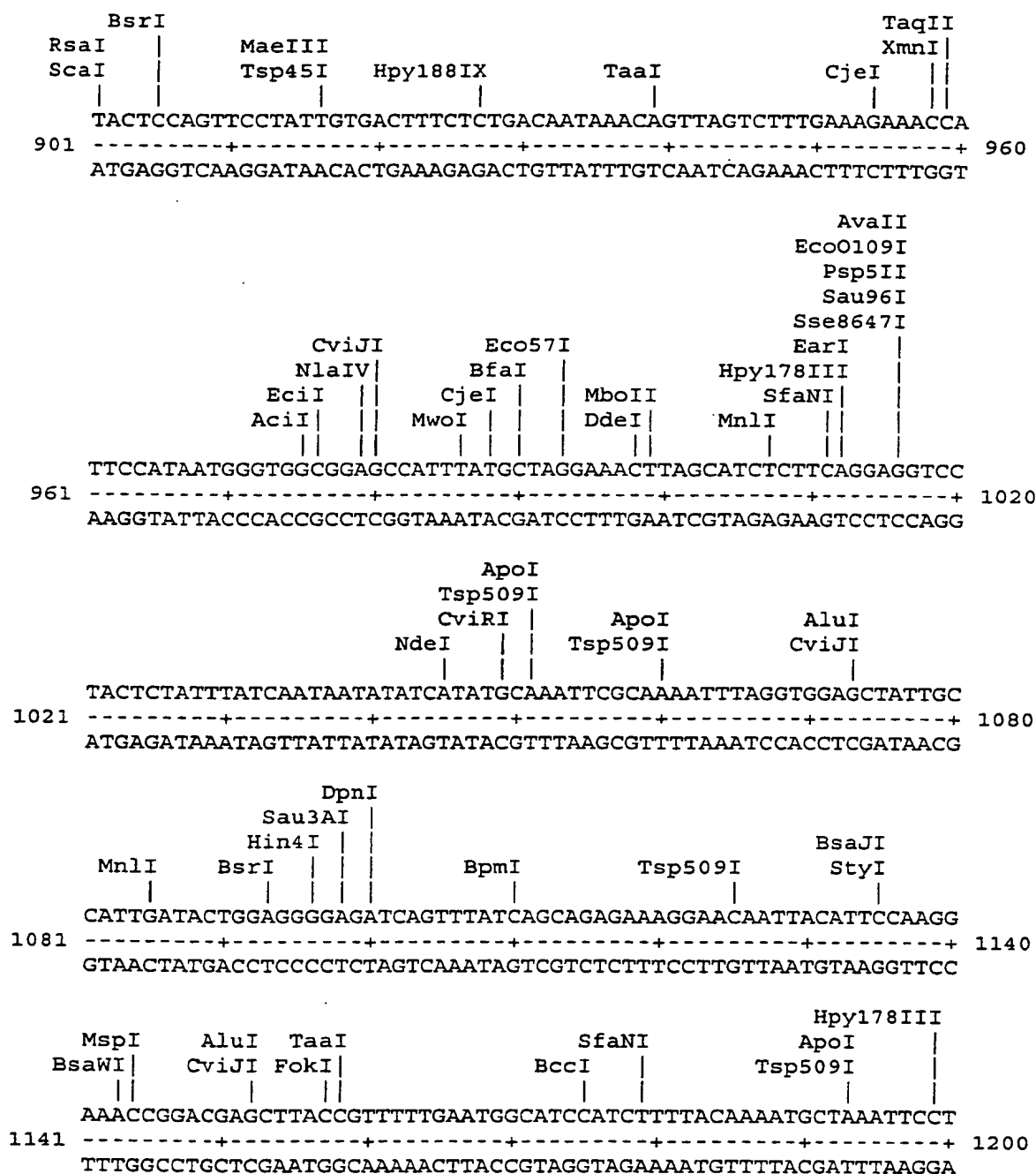
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09868987 "4001" 29965550

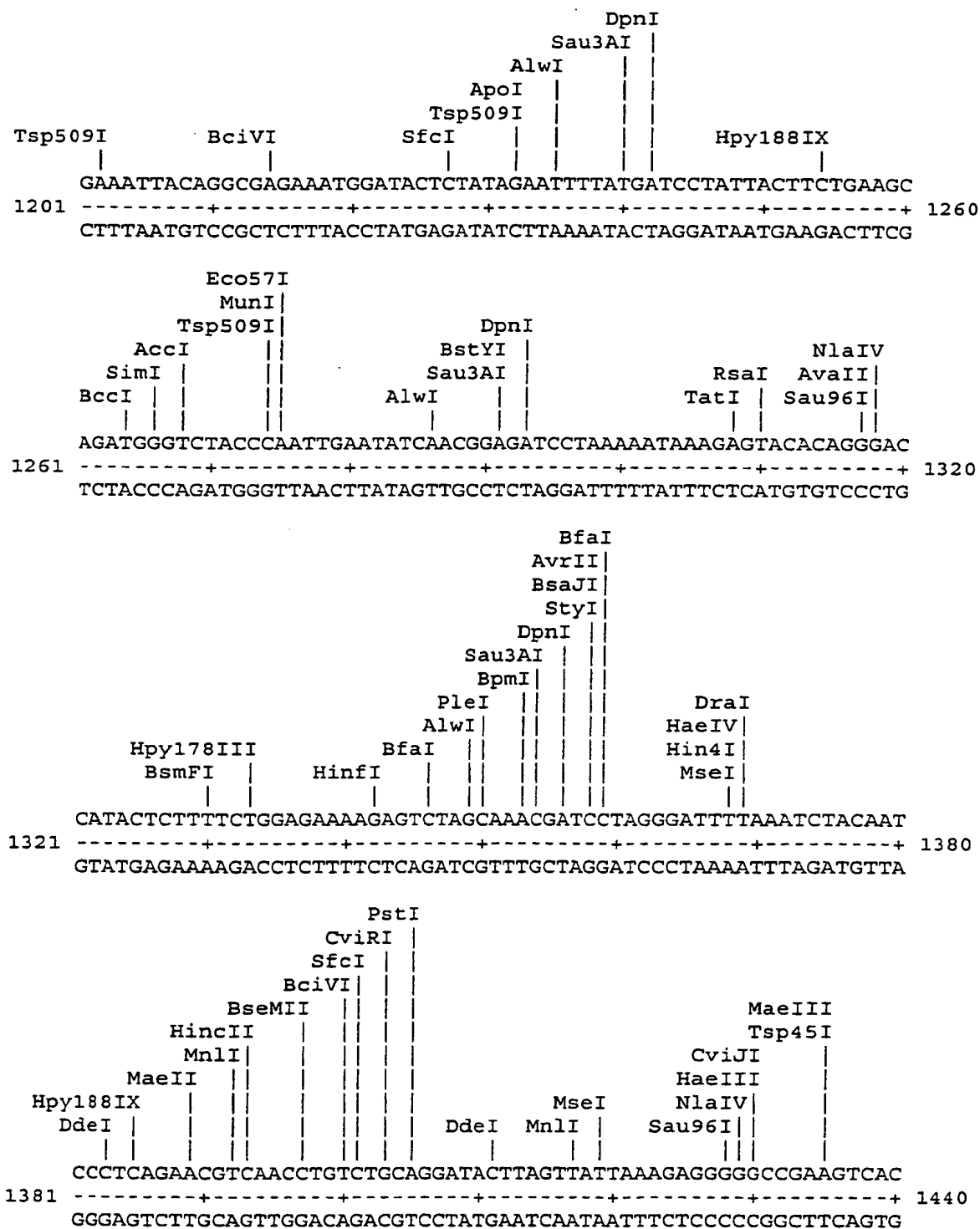
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Figure 6 (continued)



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Figure 6 (continued)



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Figure 6 (continued)

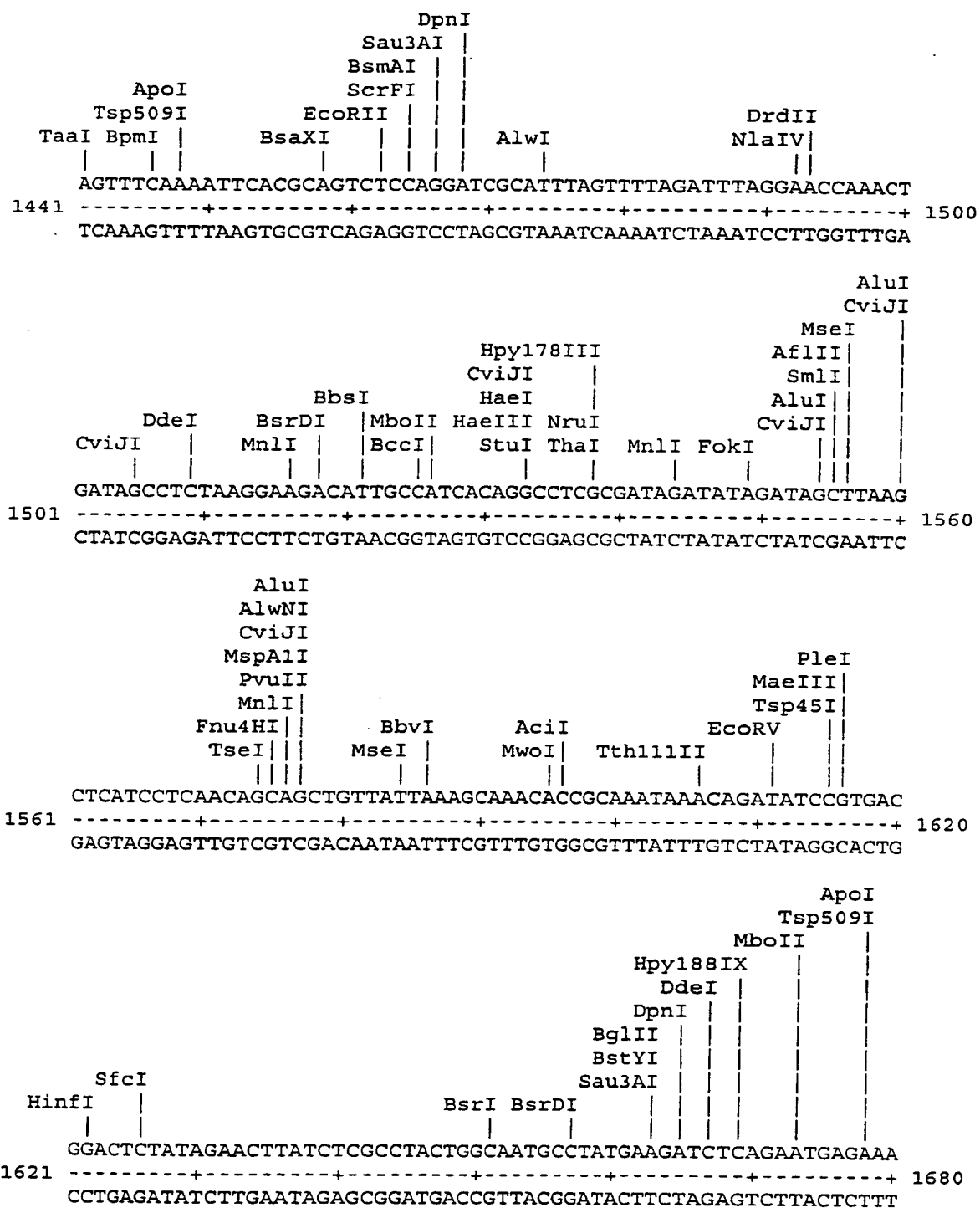
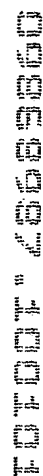
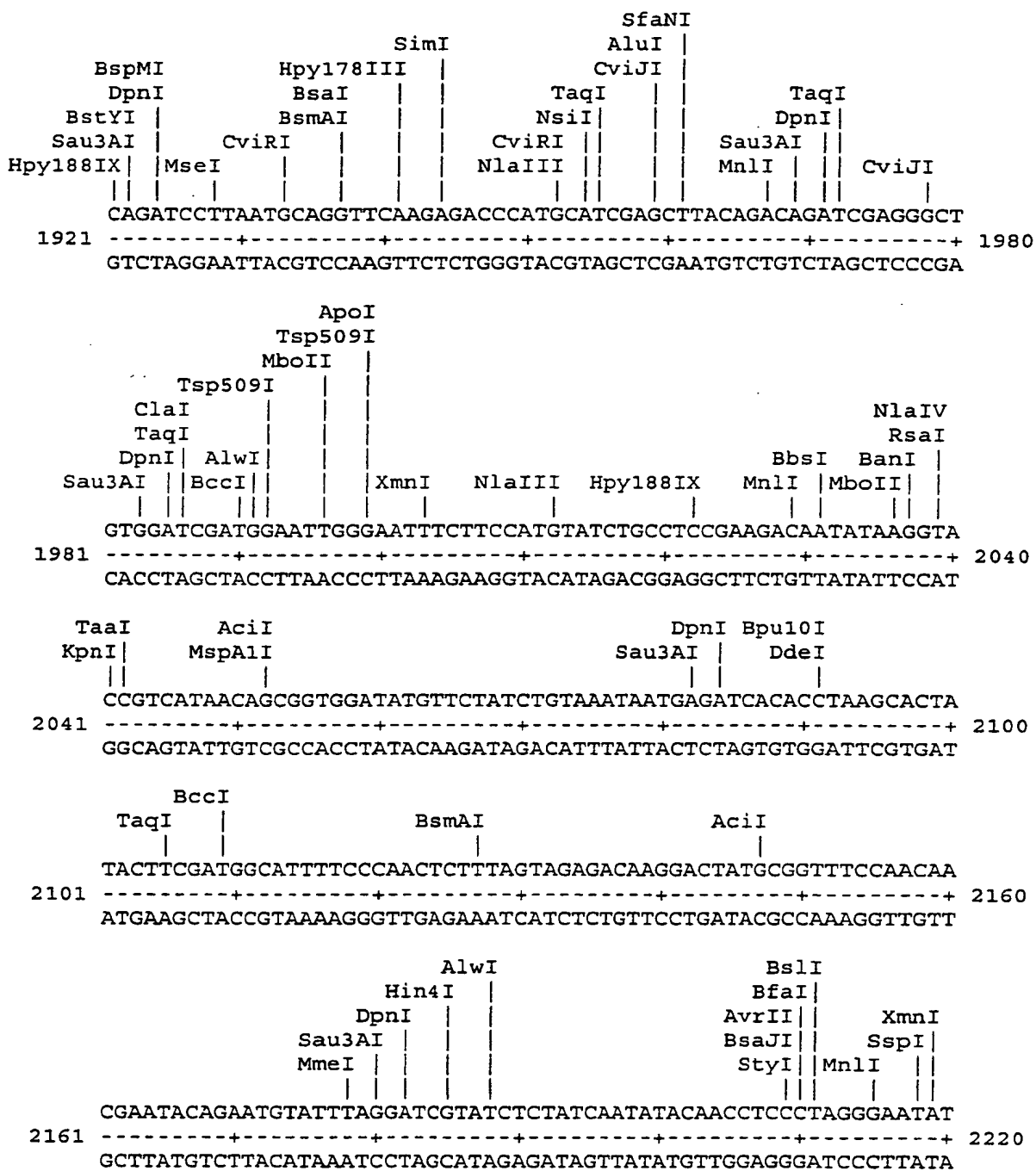


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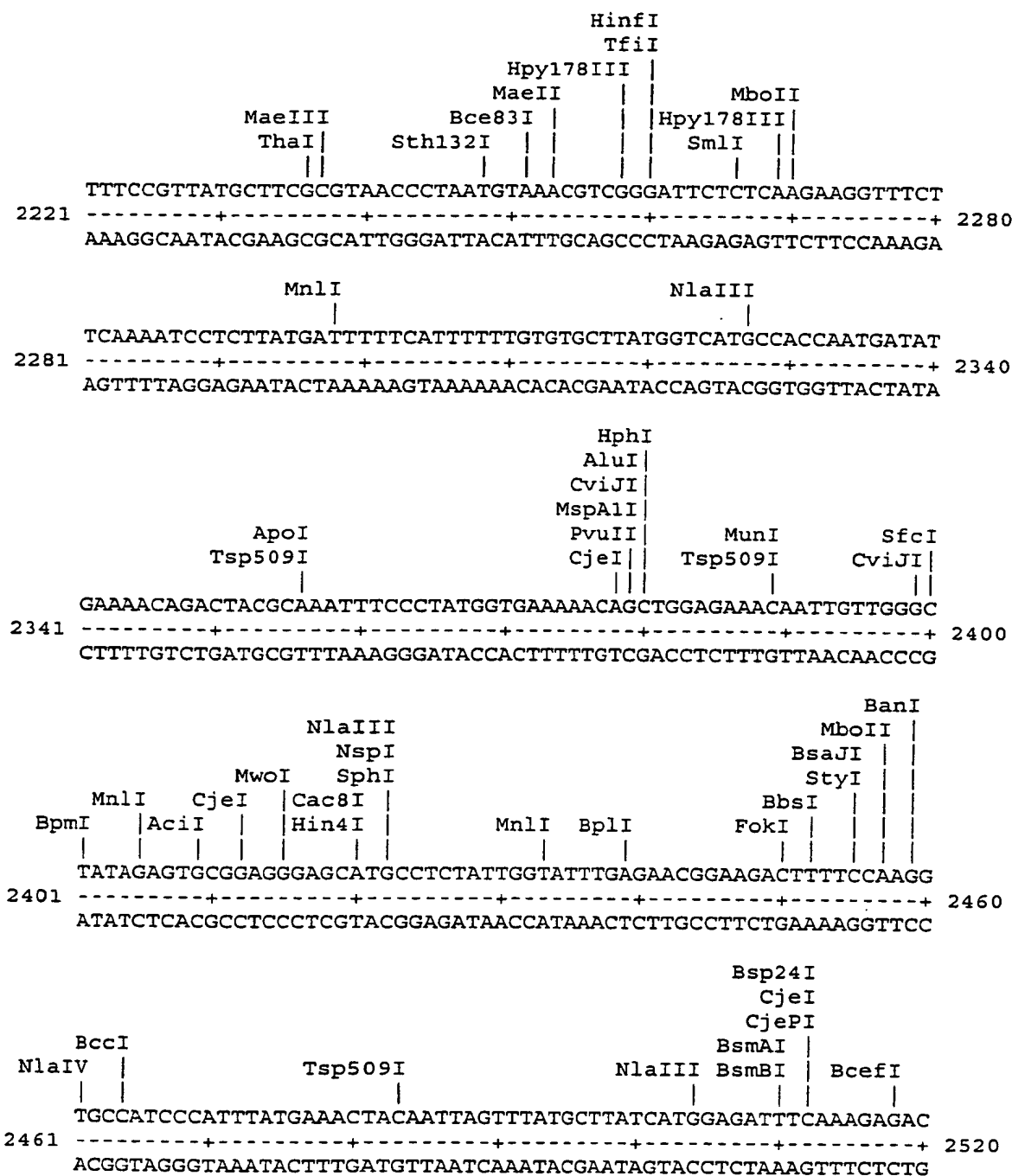
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Figure 6 (continued)



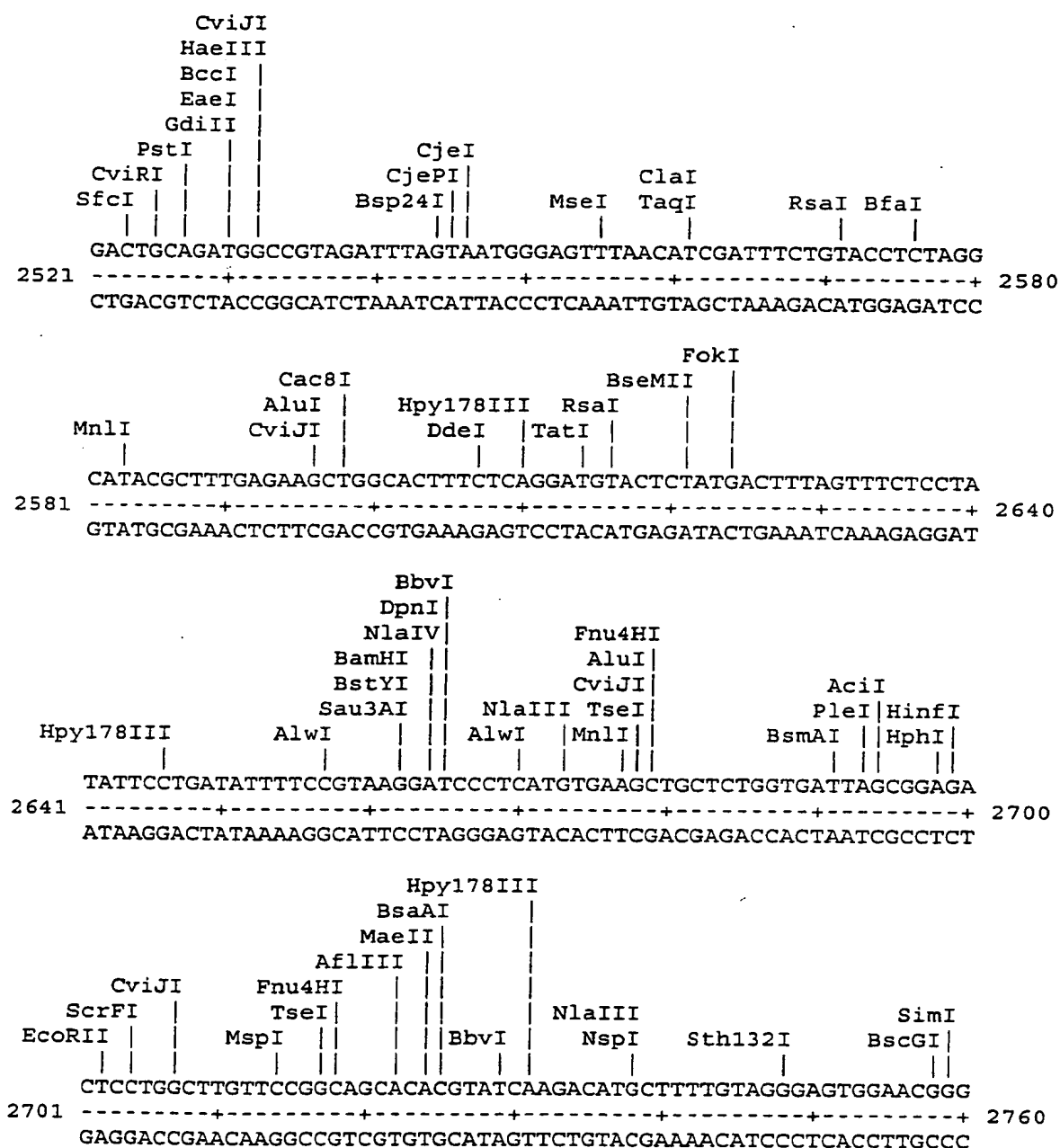
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Figure 6 (continued)



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Figure 6 (continued)



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Figure 6 (continued)

MnlI
 BanII
 BsiHKA I
 Bsp1286 I
 SacI
 AluI
 CviJI
 DdeI
 BseMII
 MseI
 BsmI
 AciI
 Fnu4HI
 TauI
 TaqI
 TCGGTATCACTTTAACGACTATACTGAGCTCTTATGTCGAGGAAGTATAGAATGCCGCCC
 2761 -----+-----+-----+-----+-----+ 2820
 AGCCATAGTGAAATTGCTGATATGACTCGAGAATACAGCTCCTTCATATCTTACGGCGGG

 Tsp509I
 BfaI
 BslI
 NlaIII
 TaaI
 Tsp509I
 CjeI
 BsrDI
 ApoI
 CCATGCTAGGAATTATAATATAAACTGTGGAAGCAAATTTTCGTTTTTAGAAGGTTTCCAT
 2821 -----+-----+-----+-----+-----+ 2880
 GGTACGATCCTTAATATTATATTTGACACCTTCGTTTAAAGCAAAAATCTTCCAAAGGTA

 AlwI
 CjeI
 MseI
 DpnI
 BstYI
 Sau3AI
 Hpy178III
 MspI
 BsaWI
 BspEI
 NlaIV
 DrdII
 XcmI
 BspGI
 Sau3AI
 DpnI
 ScrFI
 HaeIV
 EcoRII
 Hin4I
 AlwI
 TGCCTGTGTGGTTCCGGATCTTAACCTATAAATCCTGGACTATGGATCATAGGCATTGGGT
 2881 -----+-----+-----+-----+-----+ 2940
 ACGGACACACCAAGGCCTAGAATTGATATTTAGGACCTGATACCTAGTATCCGTAACCCA

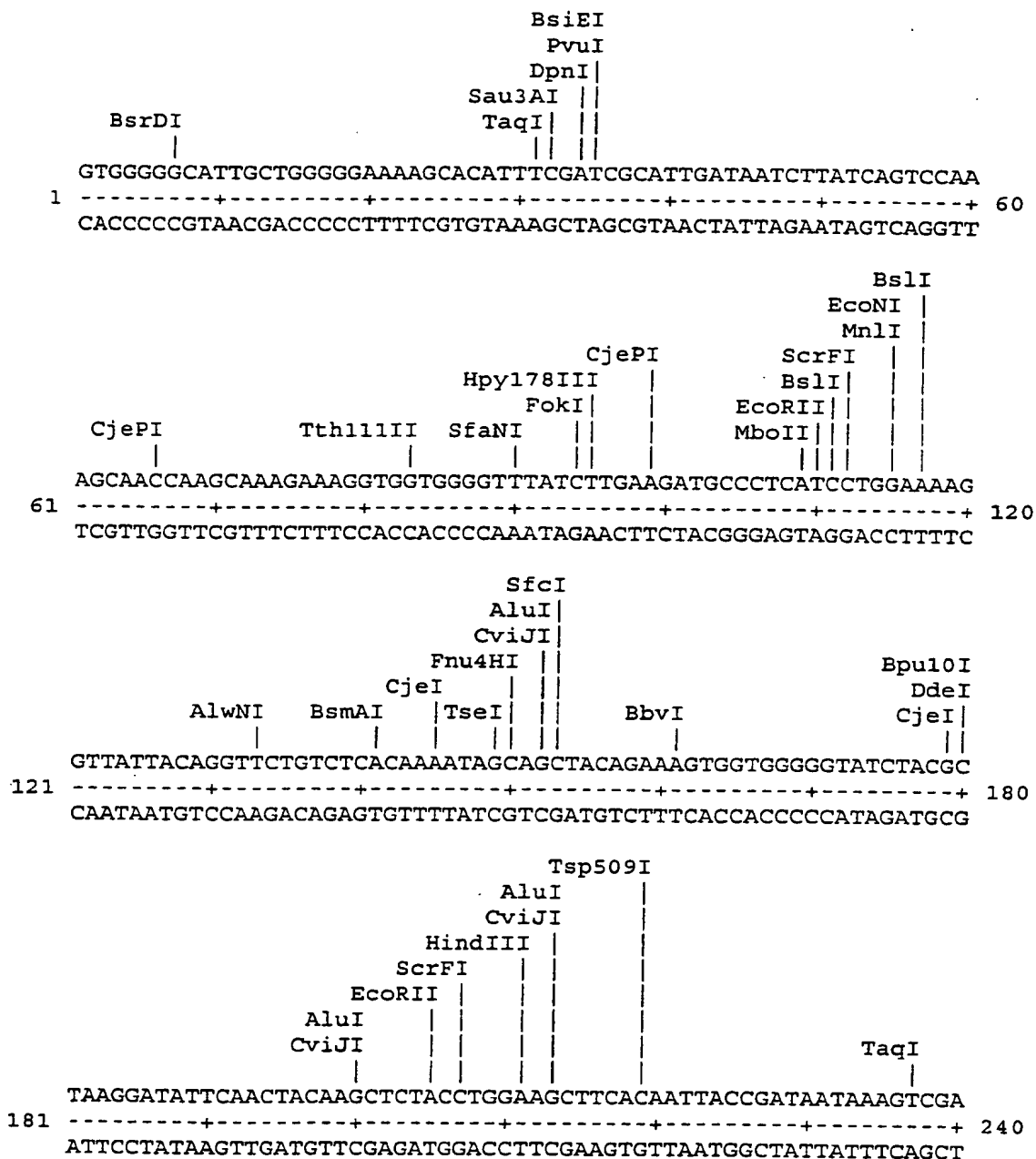
 Hpy178III
 TaqI
 TTCTCGAACT
 2941 -----+ 2950
 AAGAGCTTGA

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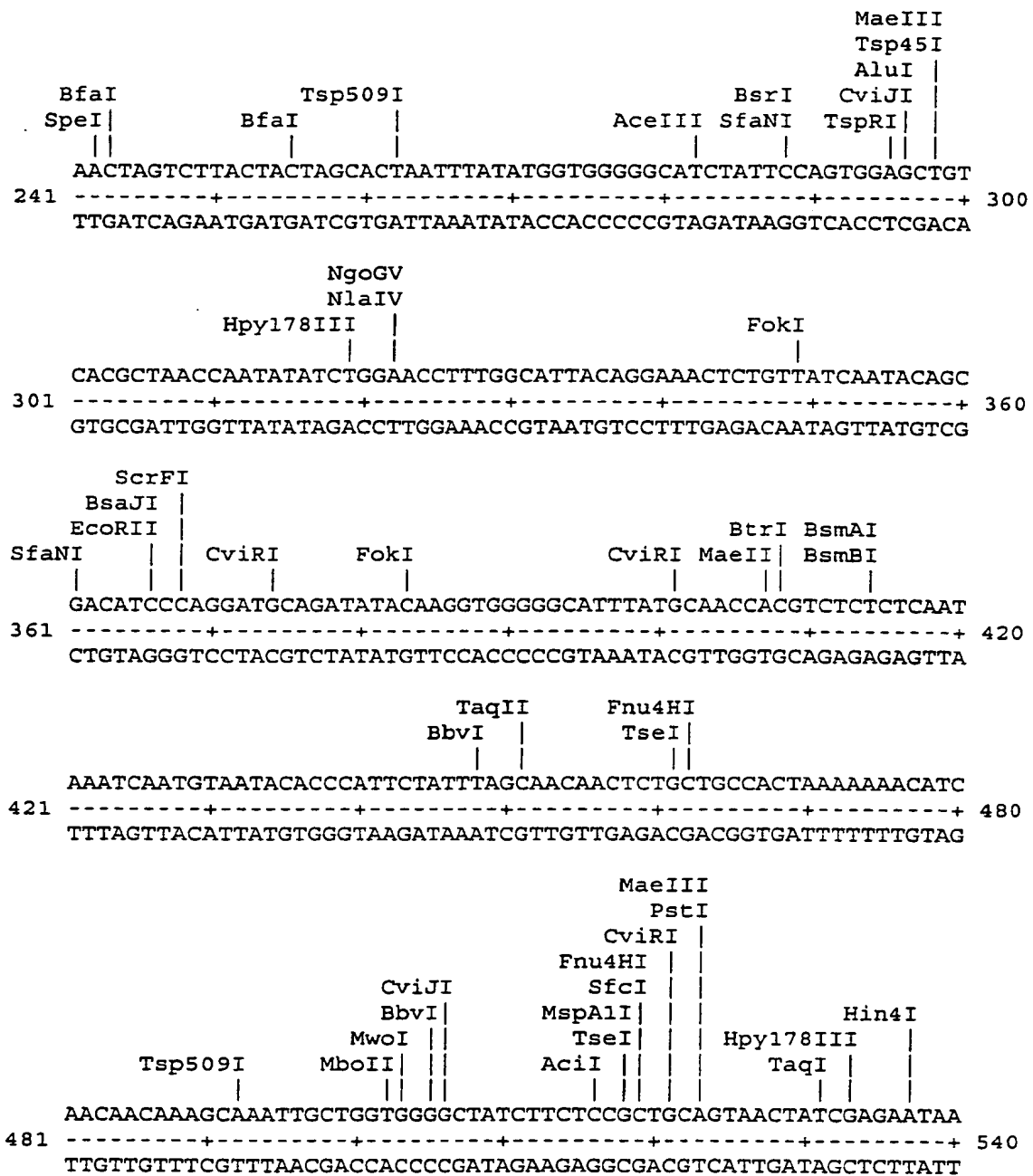
Figure 7

Restriction enzyme analysis of CPN100325 (RY 62 - SEQ ID NO. 7)



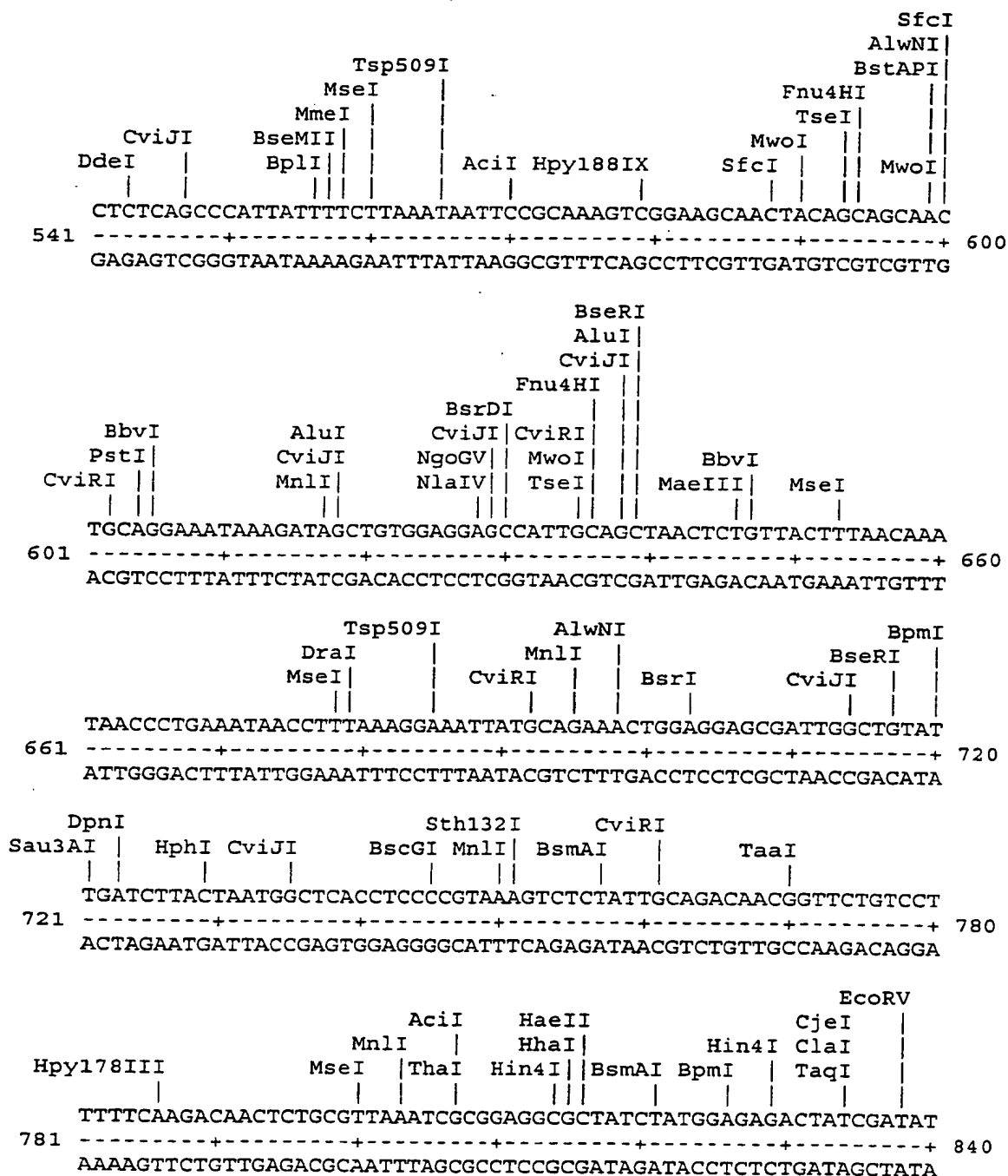
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Figure 7 (continued)



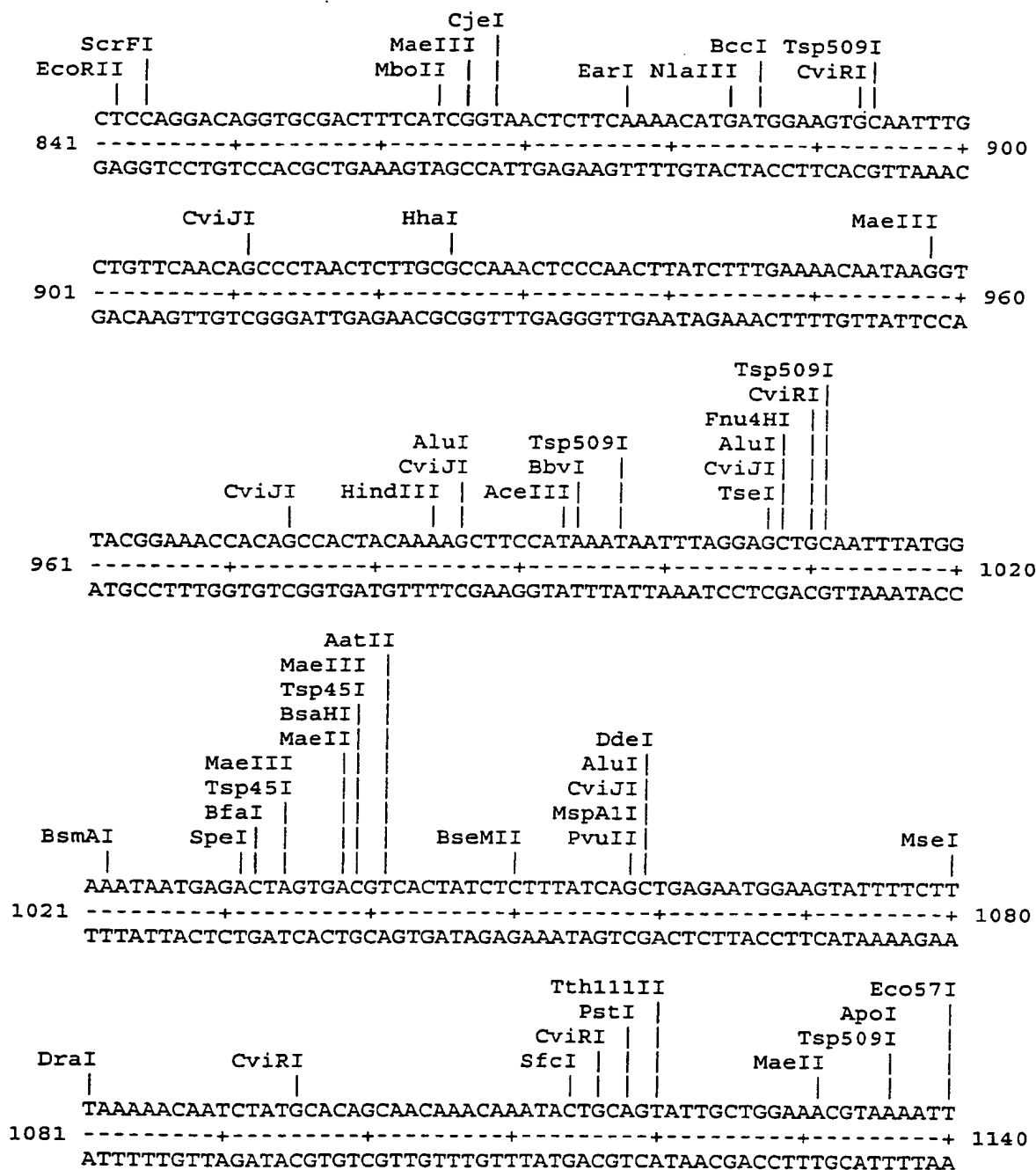
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Figure 7 (continued)



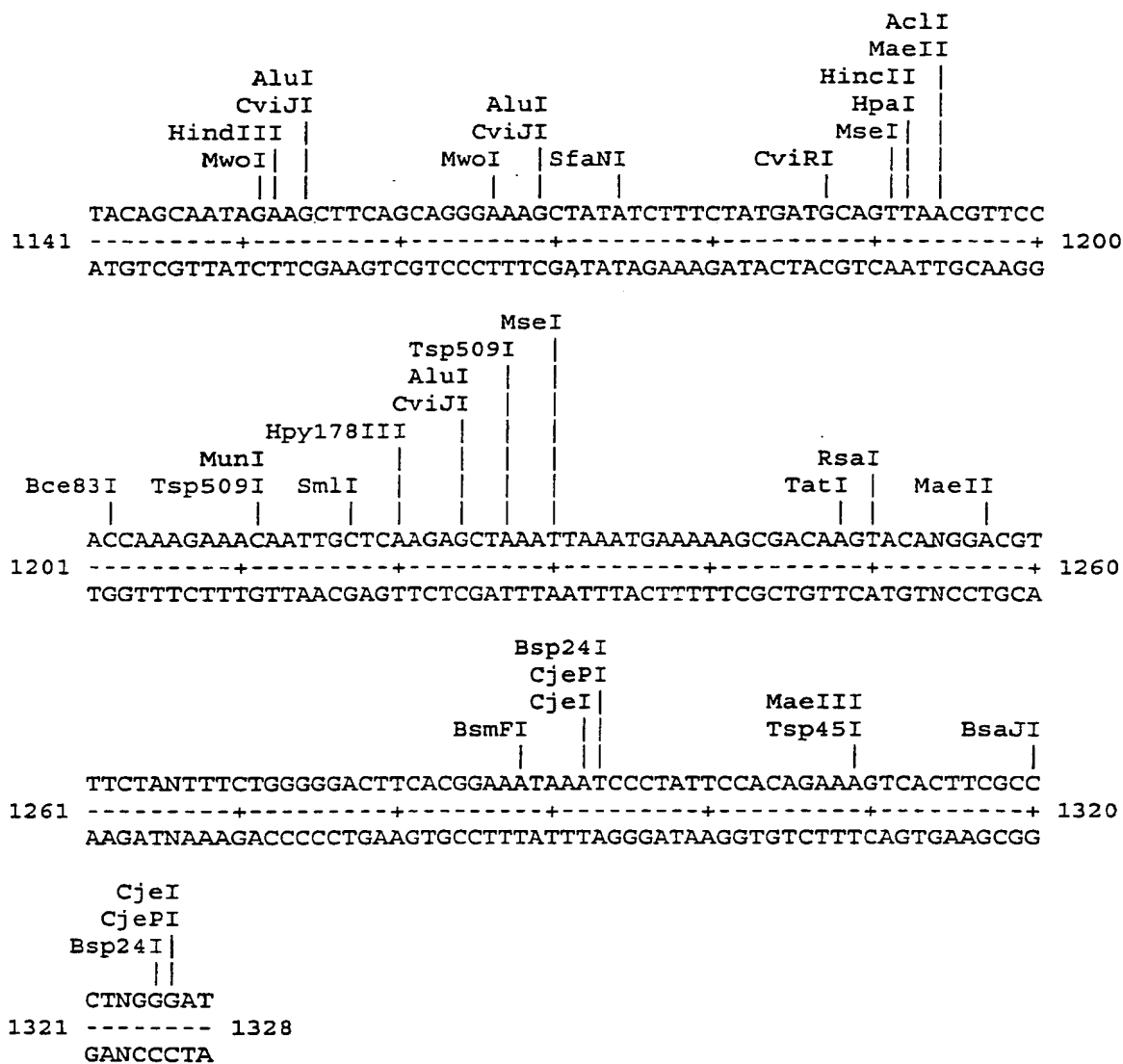
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Figure 7 (continued)



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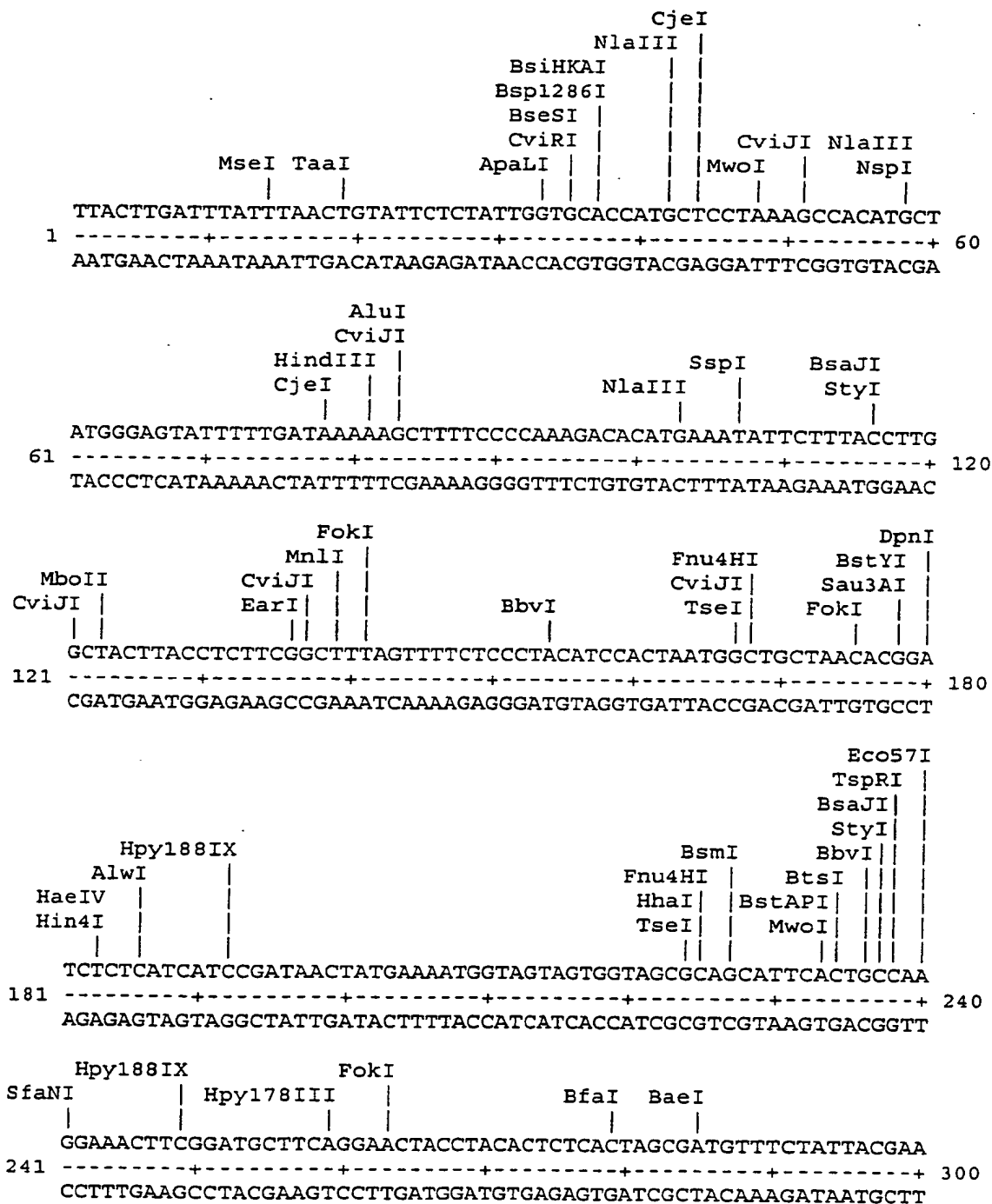
Figure 7 (continued)



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Figure 8

Restriction enzyme analysis of CPN100368 (RY 63 - SEQ ID NO. 8)



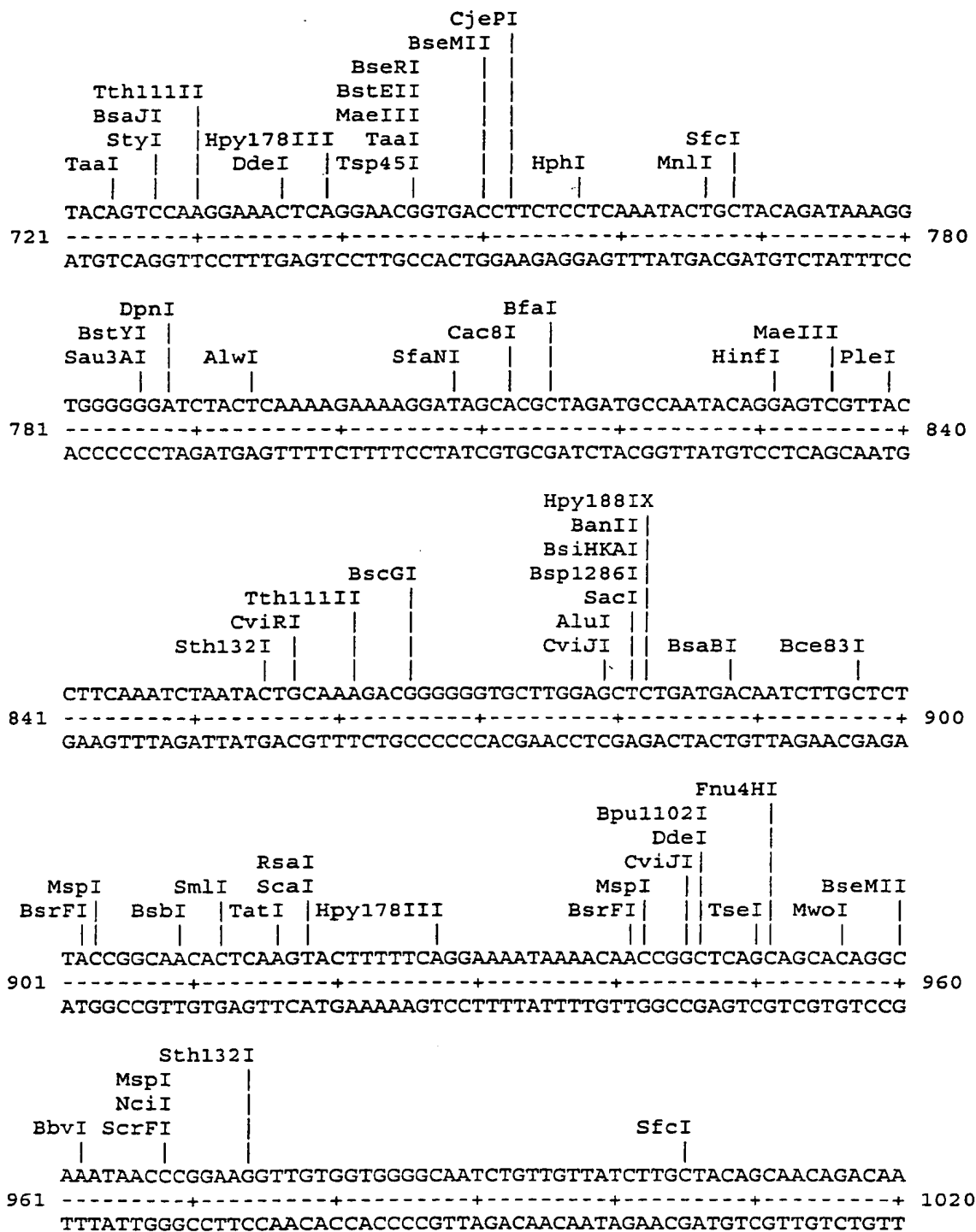
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Figure 9 (continued)

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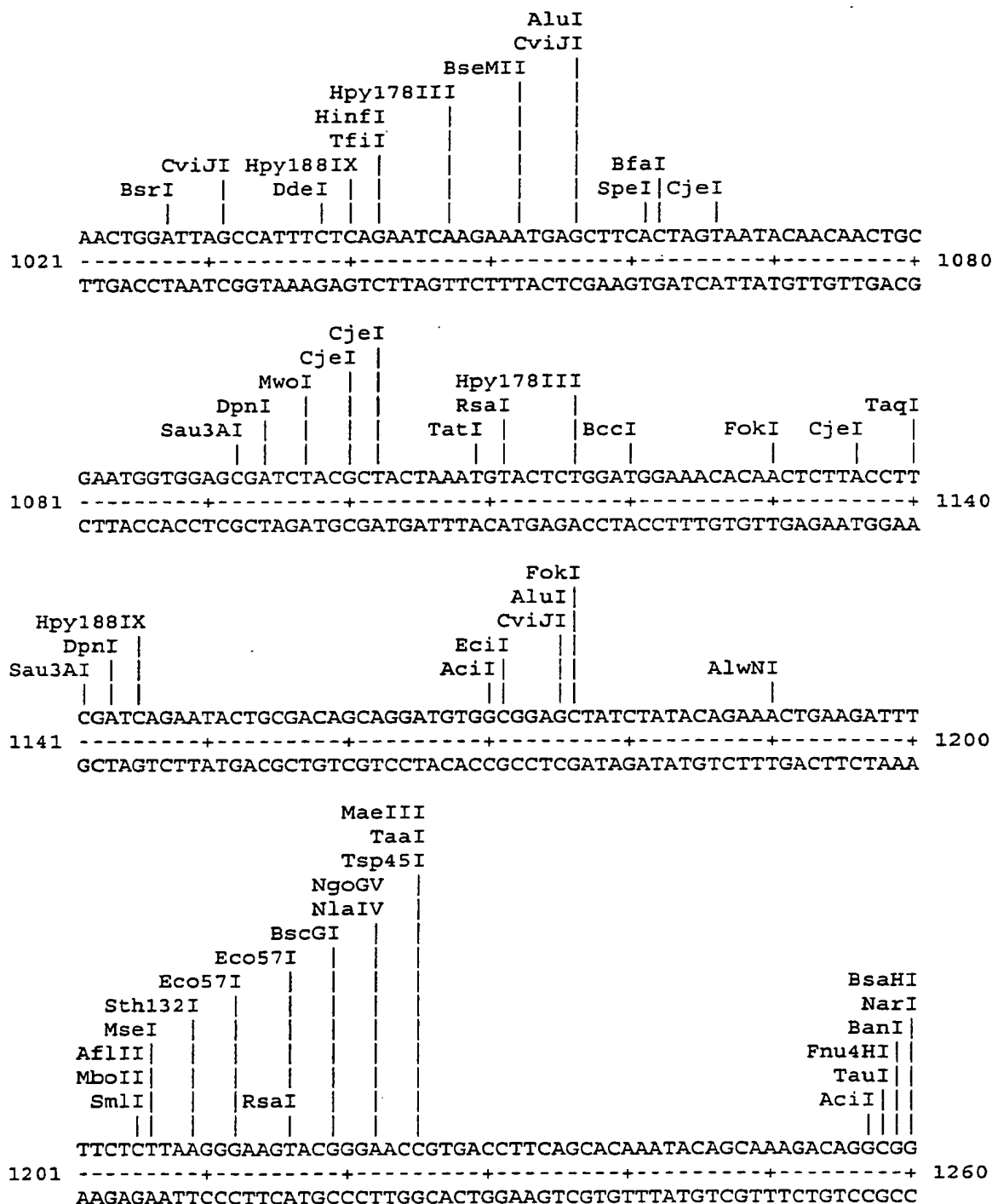
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Figure 9 (continued)



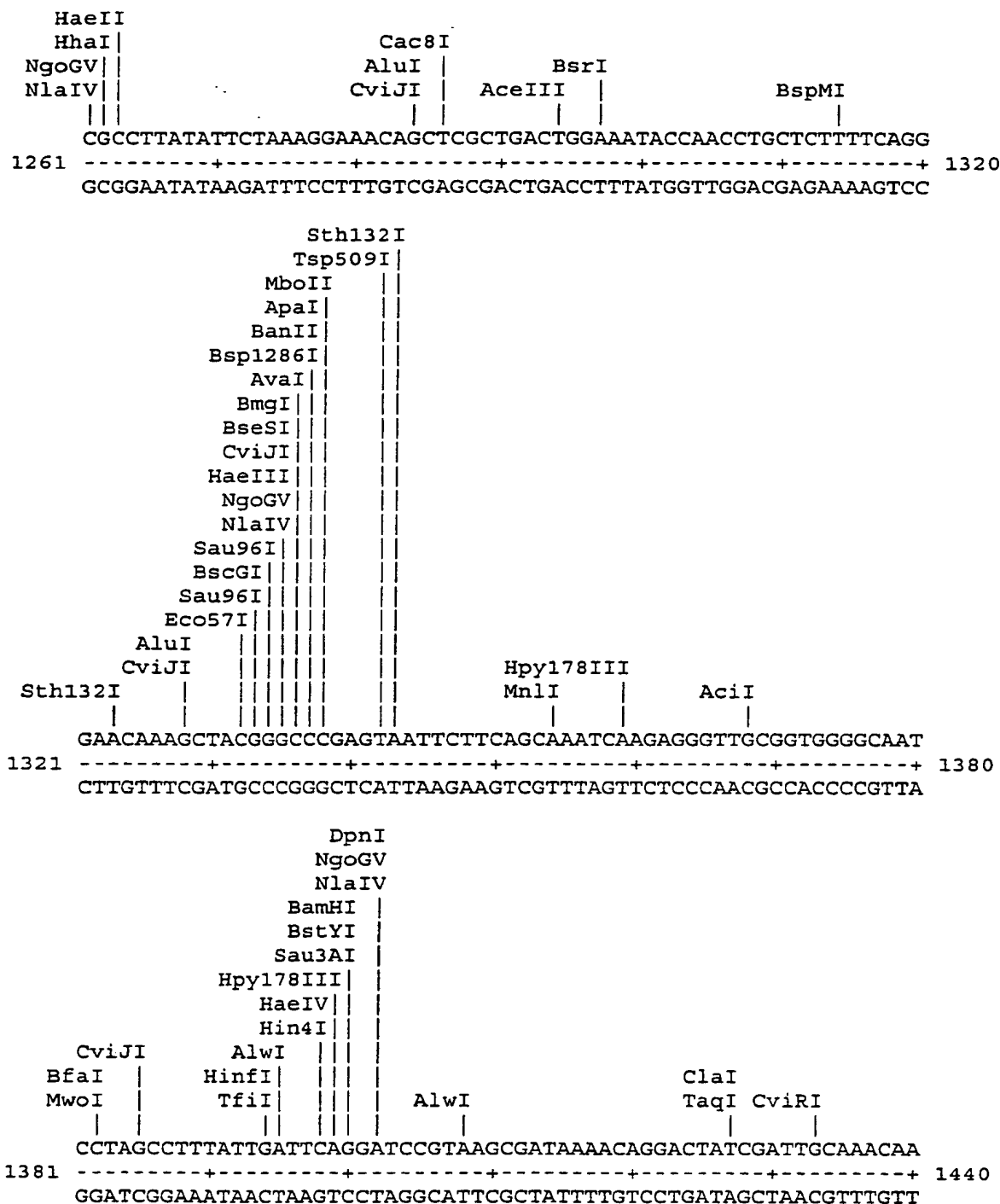
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Figure 9 (continued)



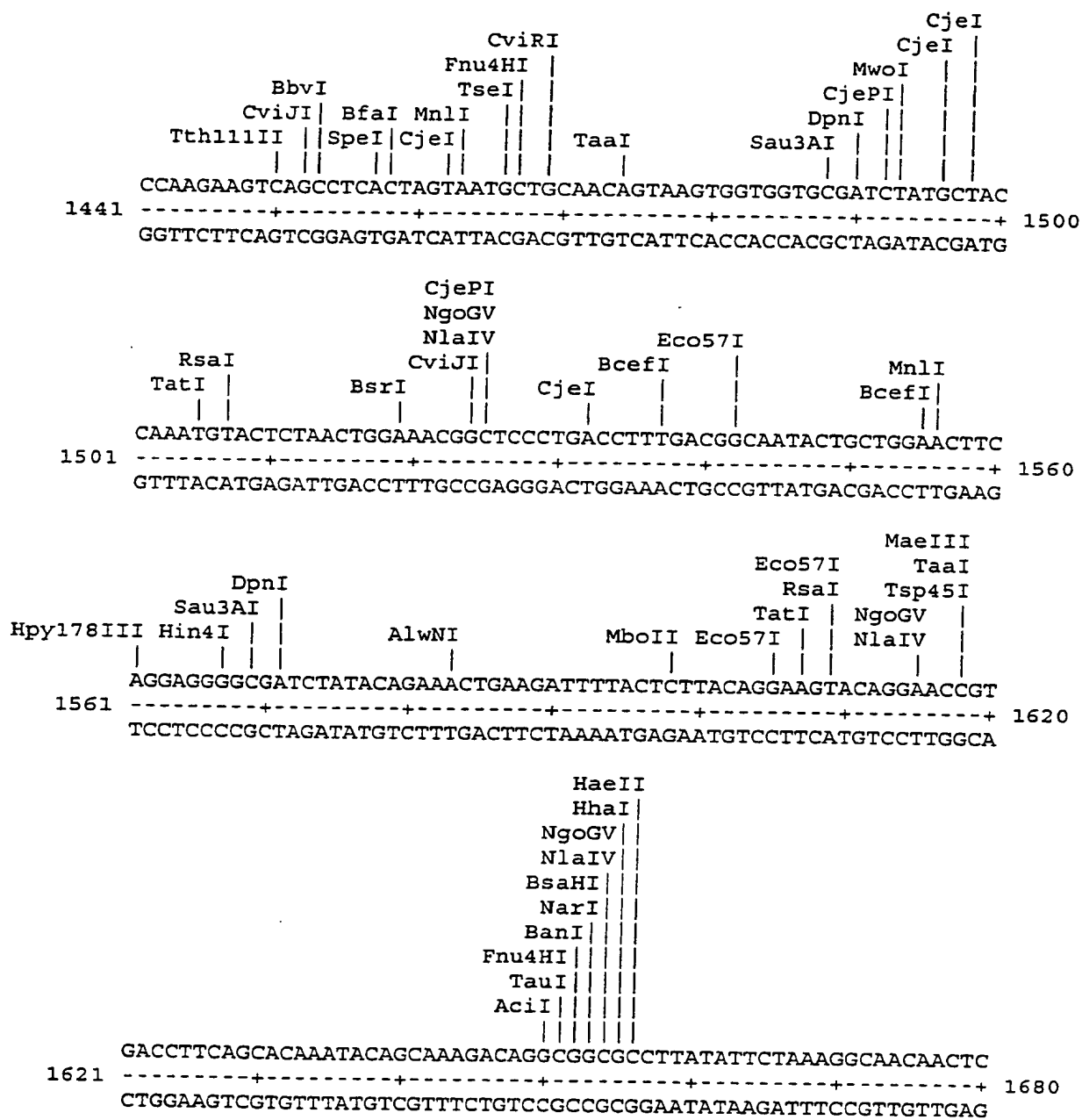
09868987 100101

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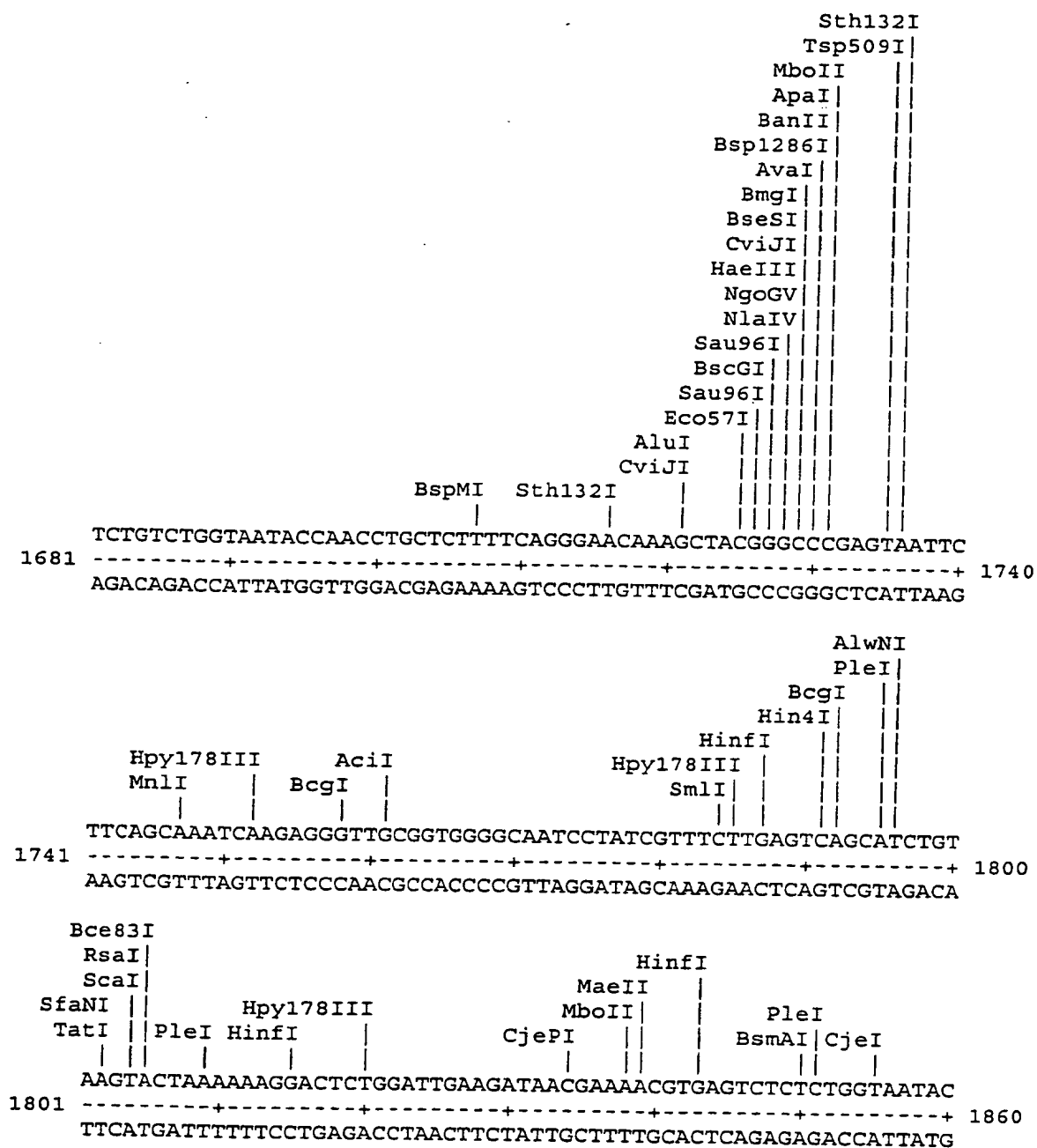
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Figure 9 (continued)



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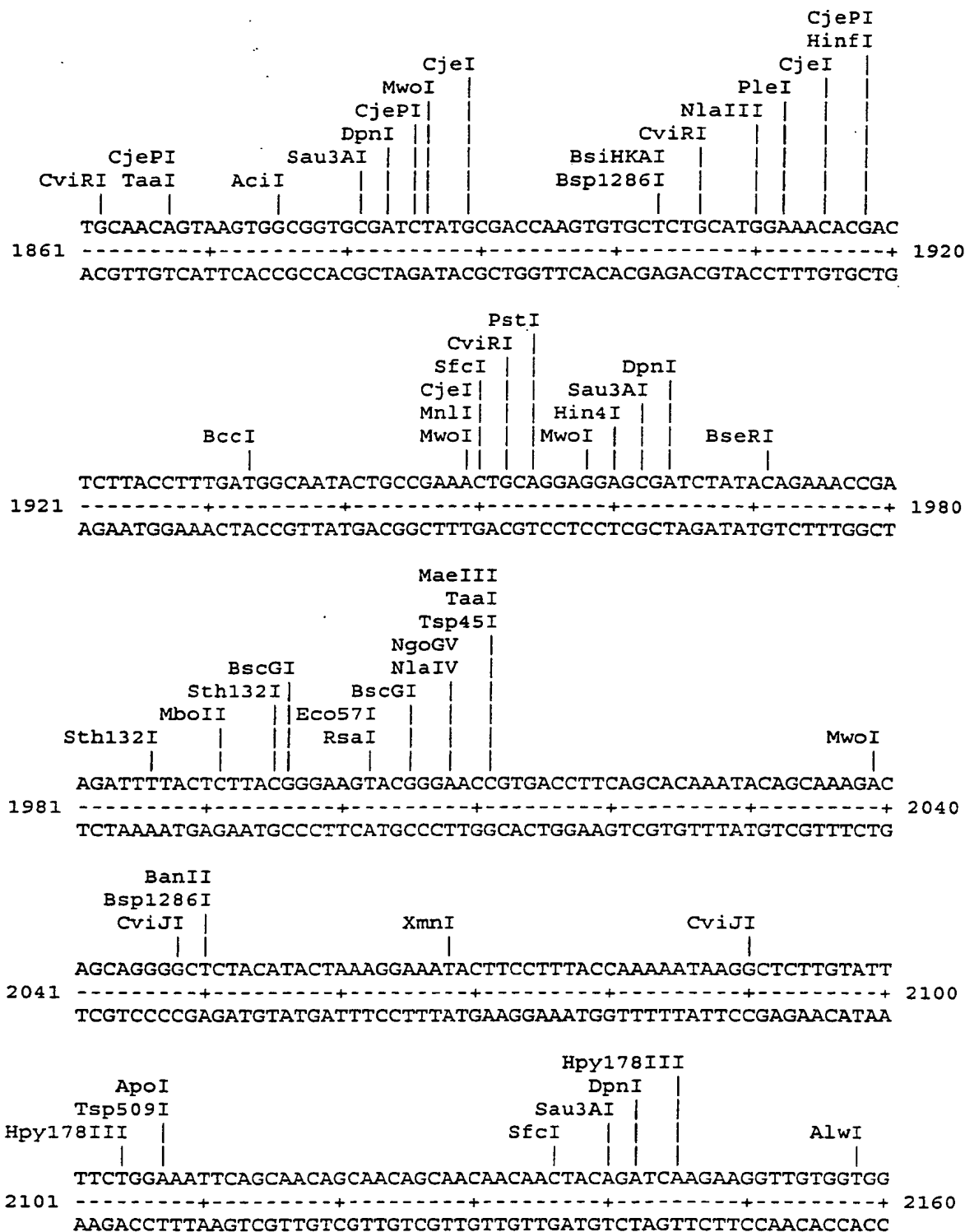
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09/868987 "100101"

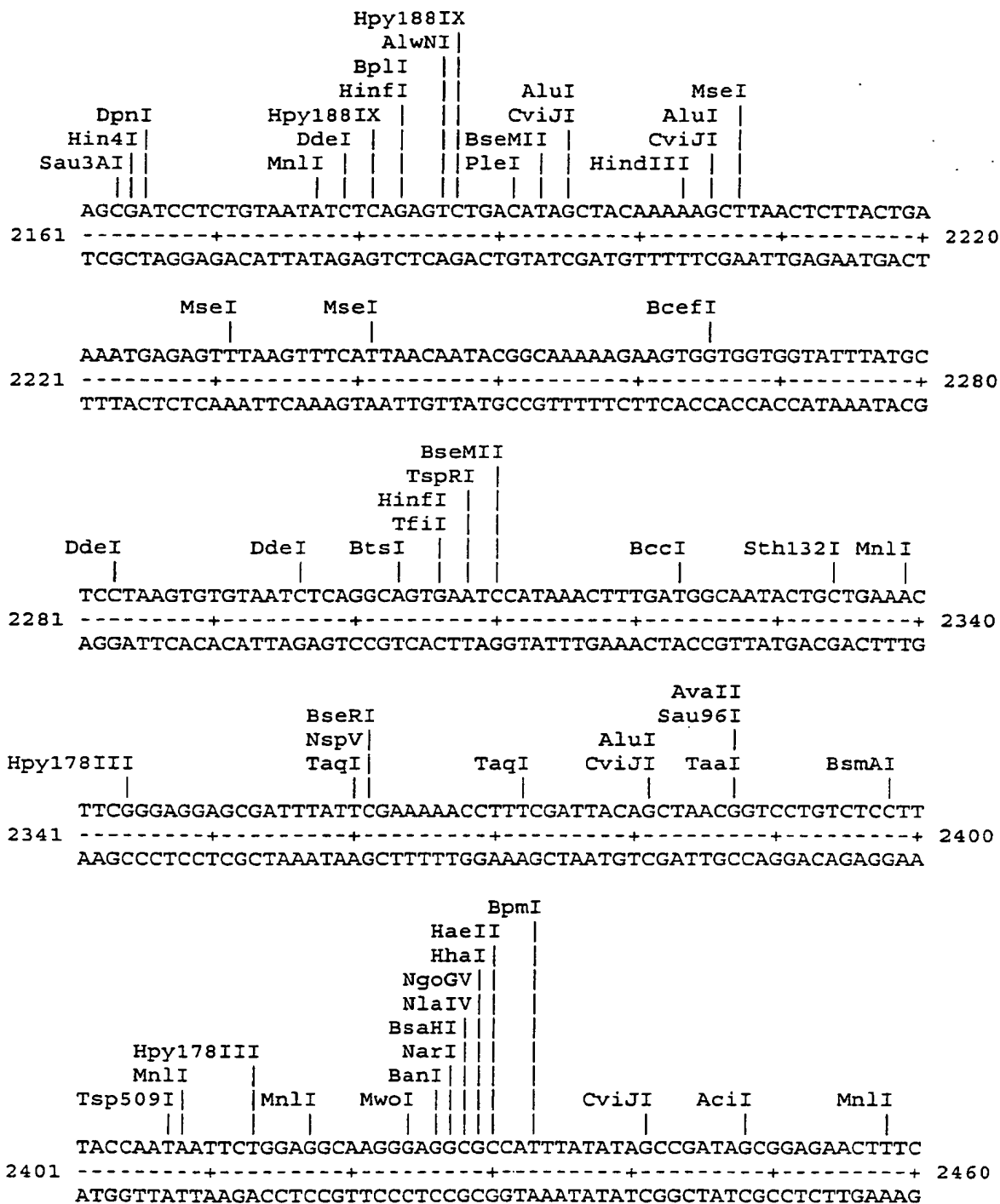
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Figure 9 (continued)



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Figure 9 (continued)



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Figure 9 (continued)

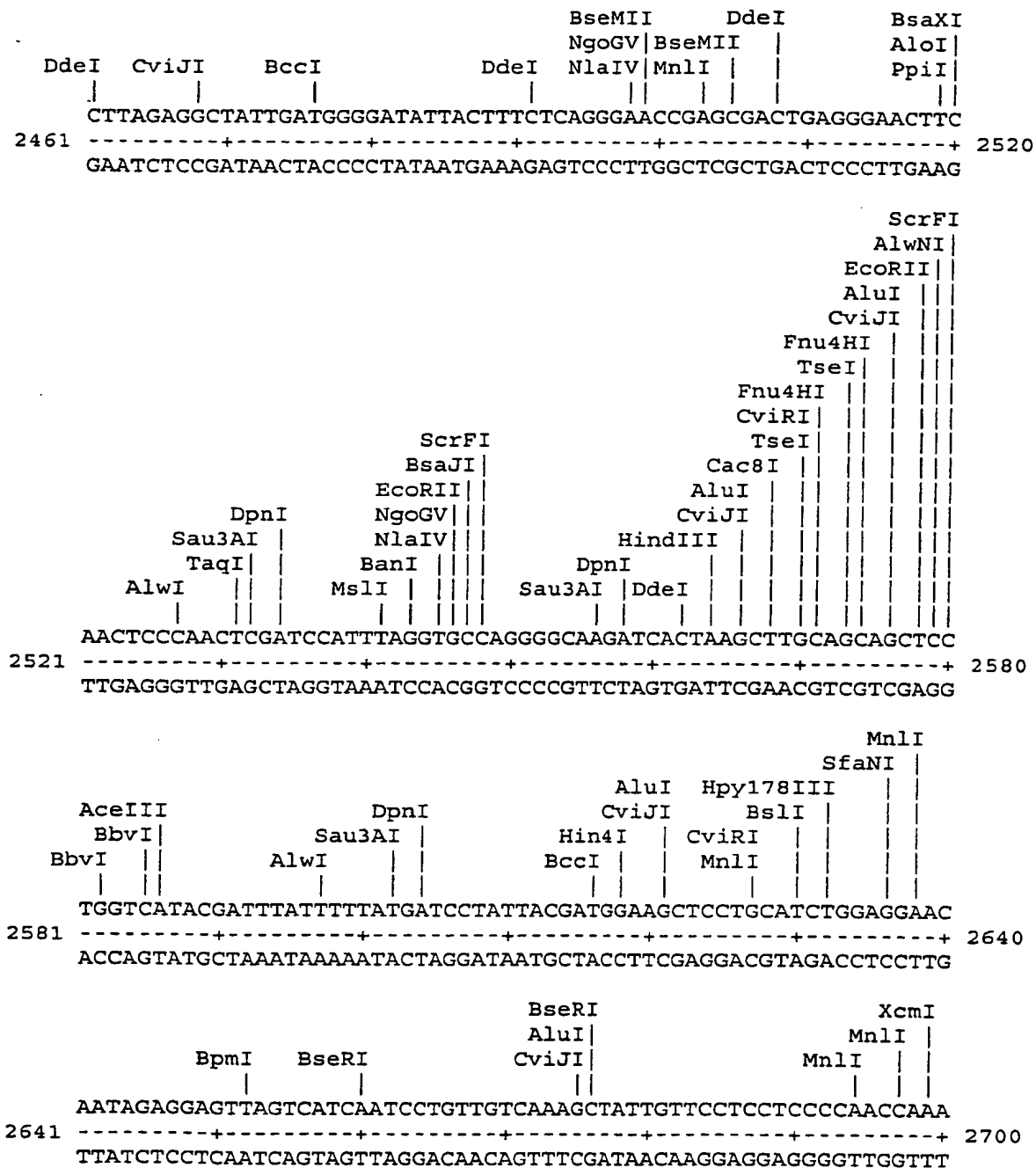


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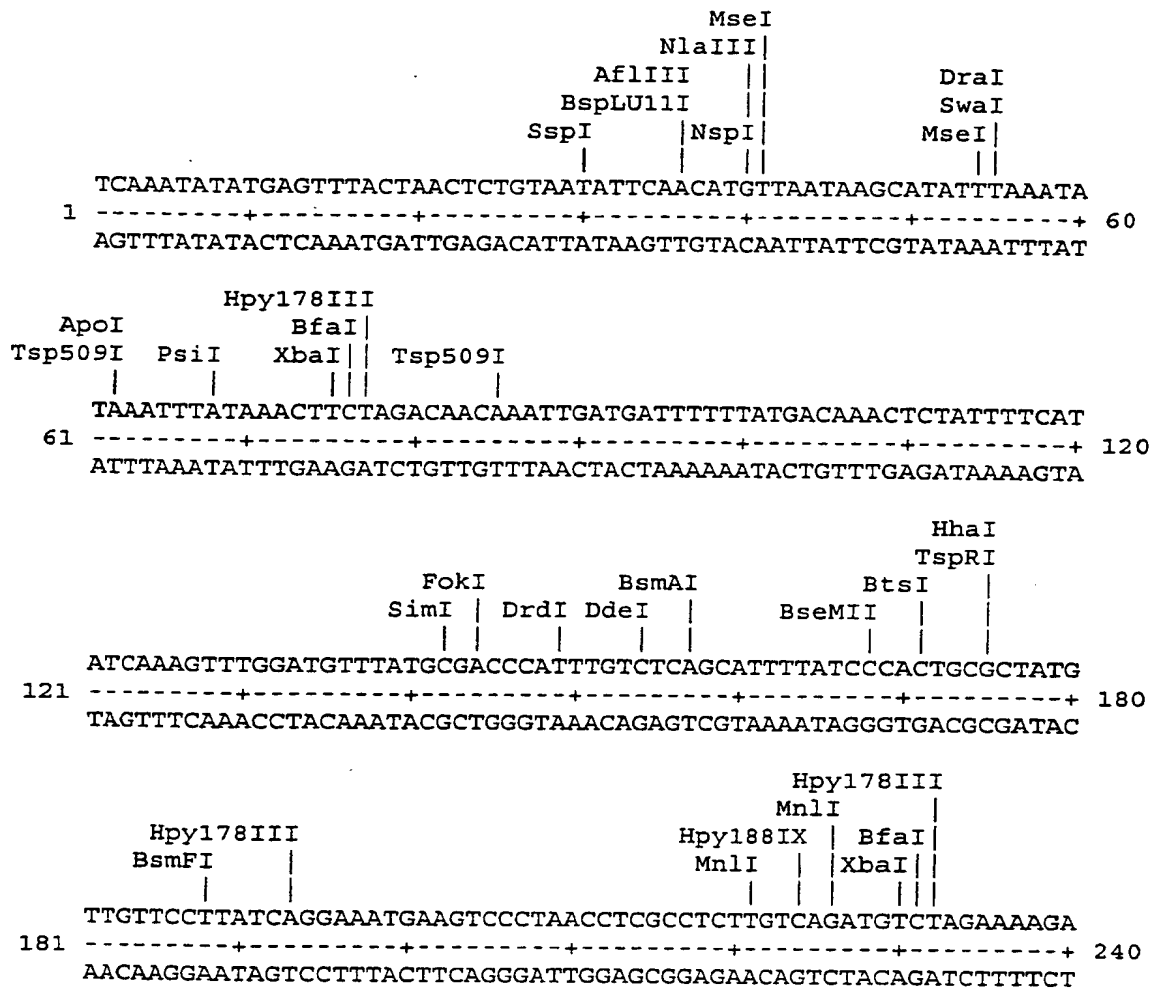
AvaII
 Sau96I
 BslI
 PflMI
 BsmI
 Bce83I
 MboII
 Hpy178III
 SmlI
 CviJI
 ApoI
 Tsp509I
 AAATGGTCCTATATAGAAAGAAAACGAATGCTCTTTGTAAAGGCTCAAGAGTAAAAAATTC
 2701 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 2760
 TTTACCAGGATATATCTTCTTTTTGCTTACGAGAAACATTCCGAGTTCTCATTTTTTAAG
 Hpy188IX
 BcefiI
 BbvI
 Fnu4HI
 TseI
 Eco57I
 ApoI
 EcoRI
 Tsp509I
 TAAAGGTATTCTCTCAATAGGTTCTGAAGTGCTGCCGTAGAATTCATAAATATCTC
 2761 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 2816
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SECRET

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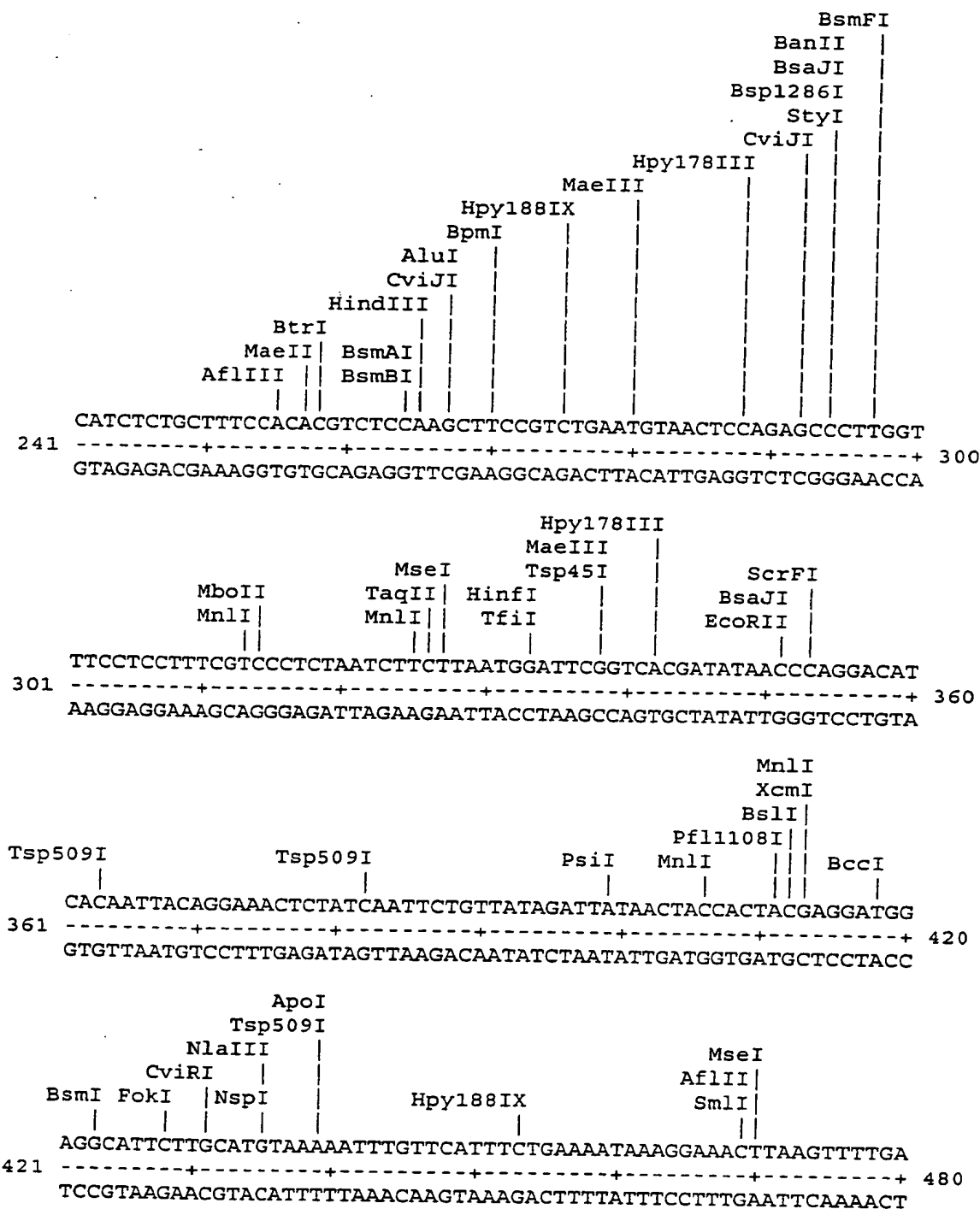
Figure 9

Restriction enzyme analysis of CPN100624 (RY 64 - SEQ ID NO. 9)



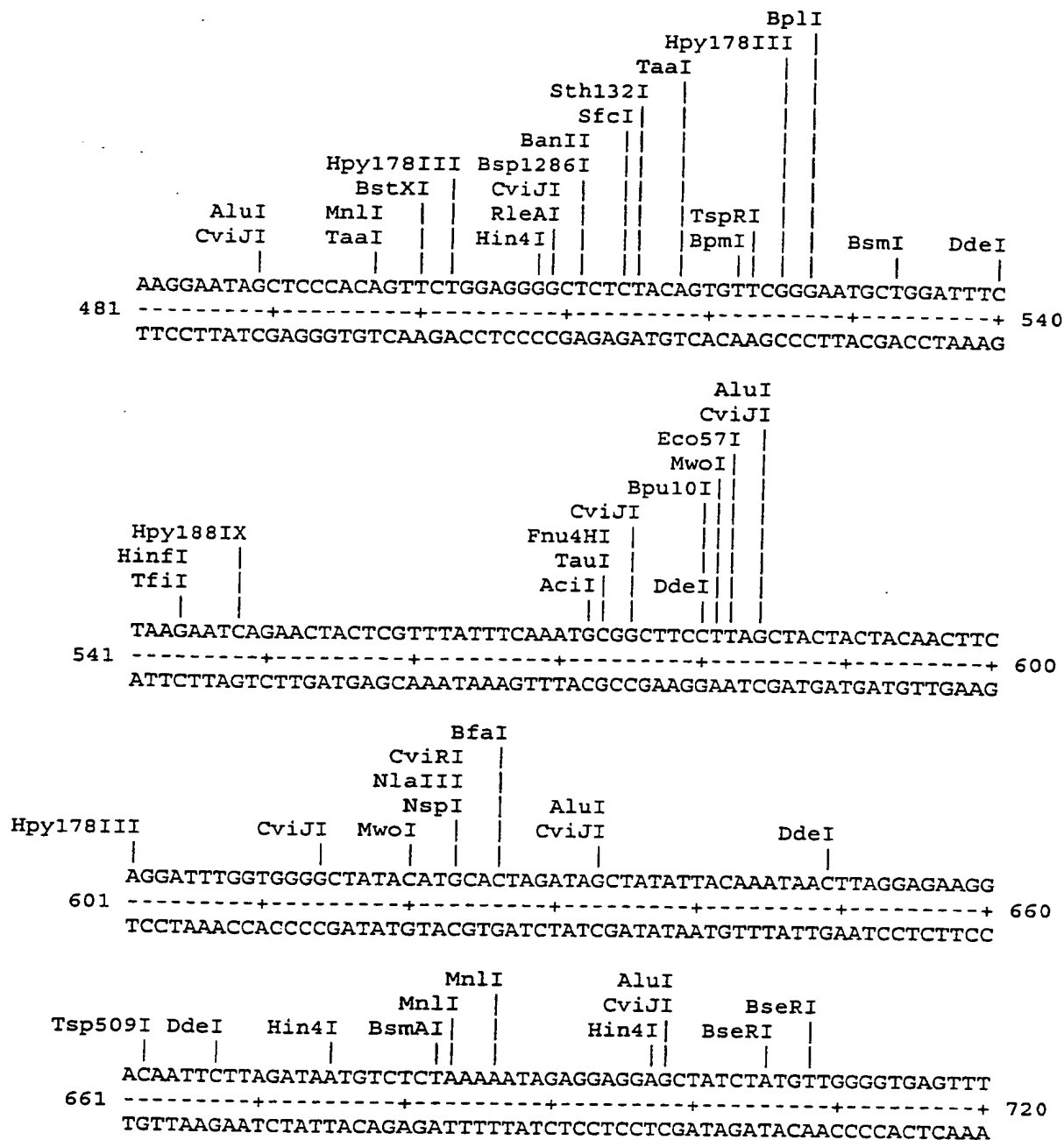
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Figure 9 (continued)



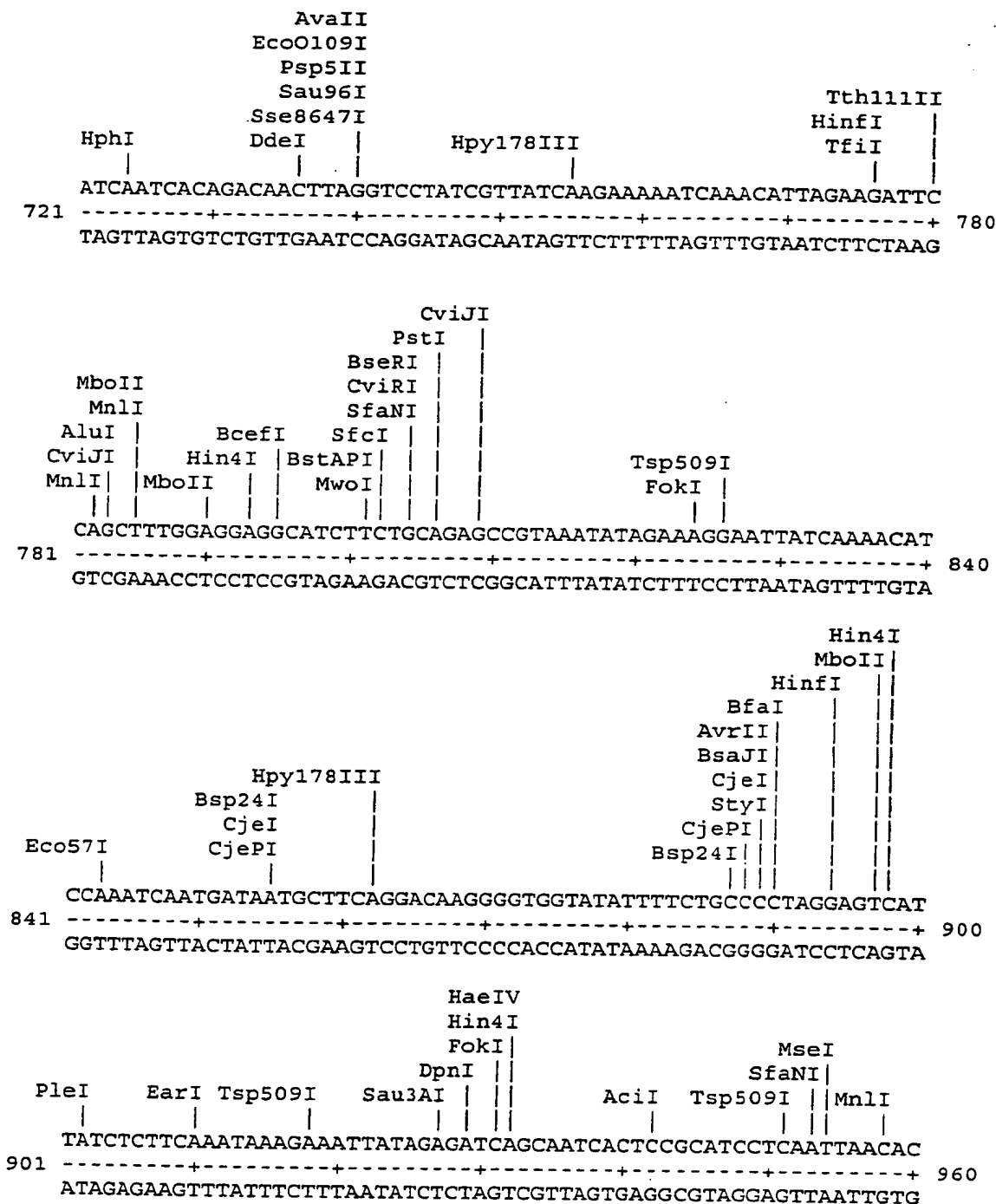
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Figure 9 (continued)



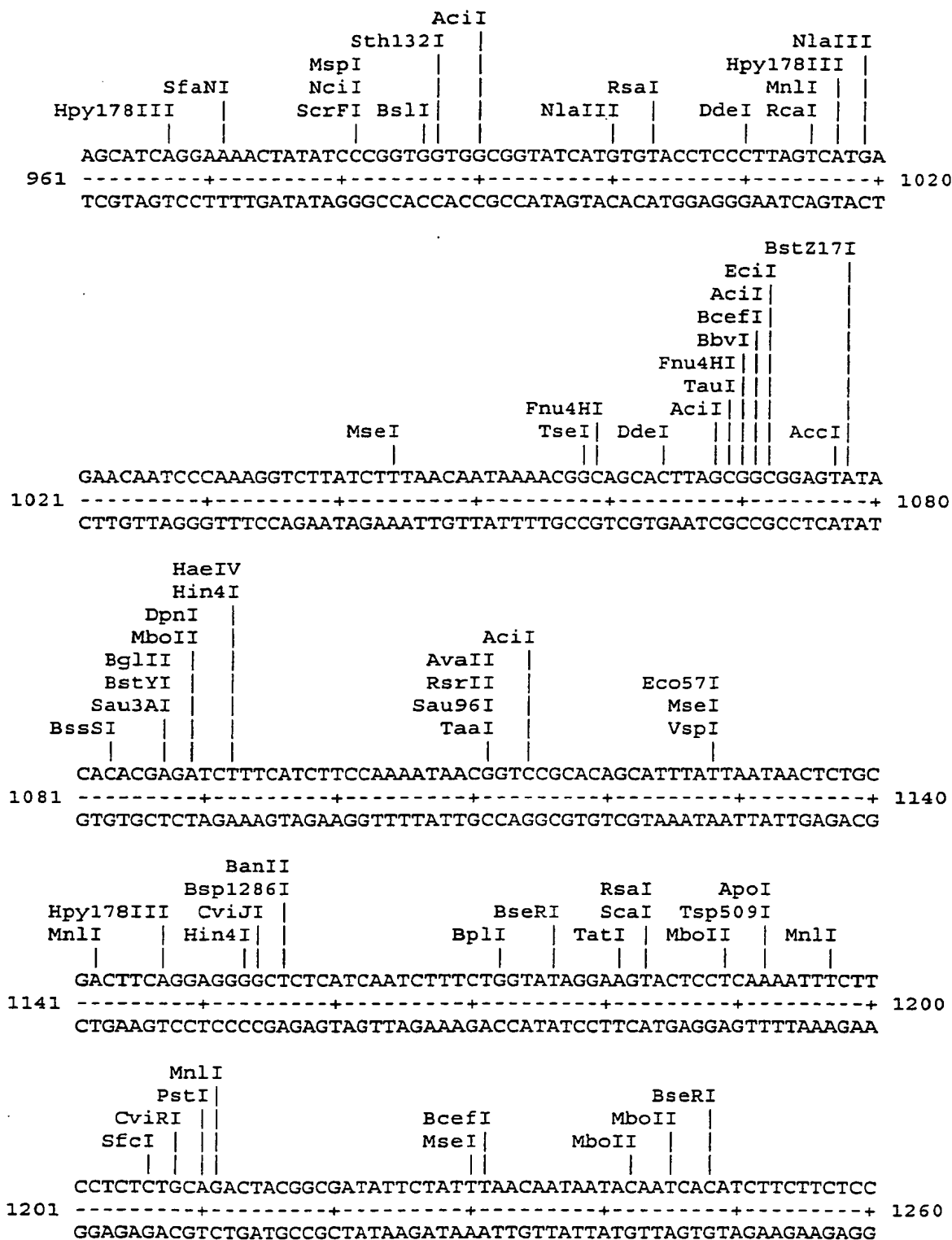
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Figure 9 (continued)



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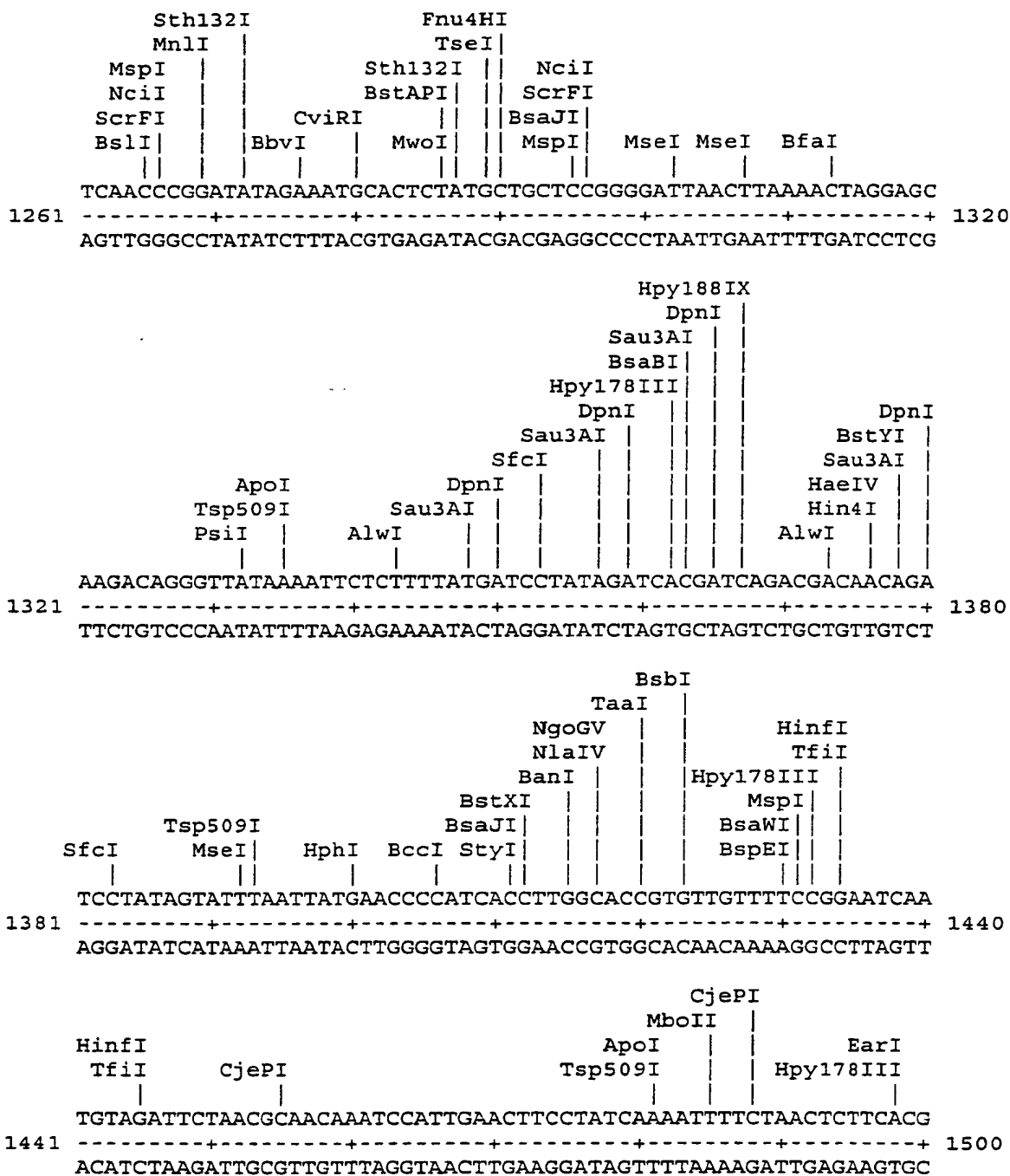
Figure 9 (continued)



FOOTNOTES 400401

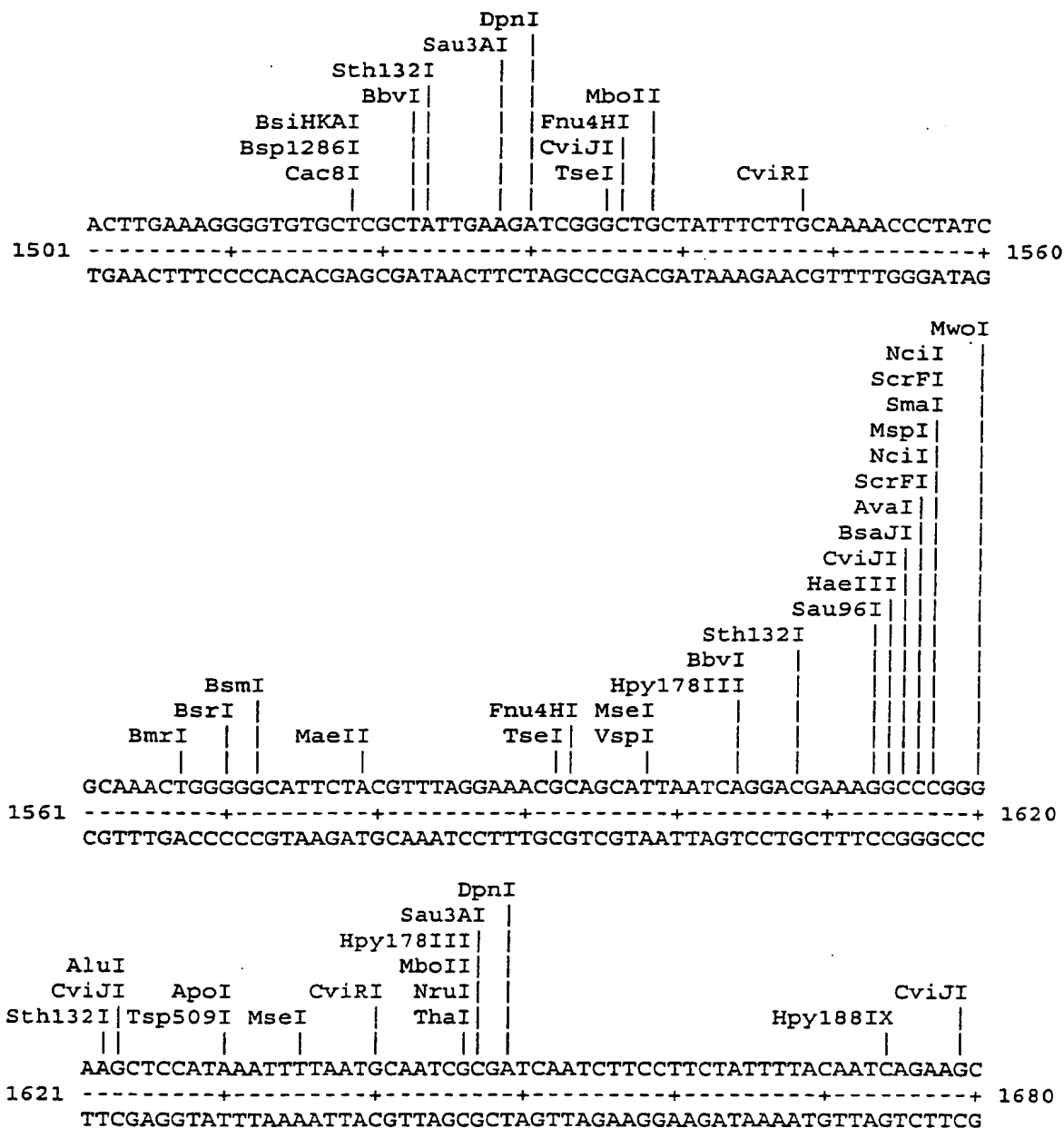
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Figure 9 (continued)



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Figure 9 (continued)



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Figure 9 (continued)

AluI Hpy178III DpnI
 CviJI AceIII NgoGV
 BbvCI BseMII NlaIV
 Bpu10I BstXI BamHI
 DdeI MnlI AlwI BstYI
 MseI Sau3AI Hpy188IX MboII
 AlwI BbsI
 CTCAGCTCCAAAGTTCTGGATTTATCCTACATTAACAGGATCCACCTATTCTGAAGACAC
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 GAGTCGAGGTTTCAAGACCTAAATAGGATGTAATTGTCCTAGGTGGATAAGACTTCTGTG

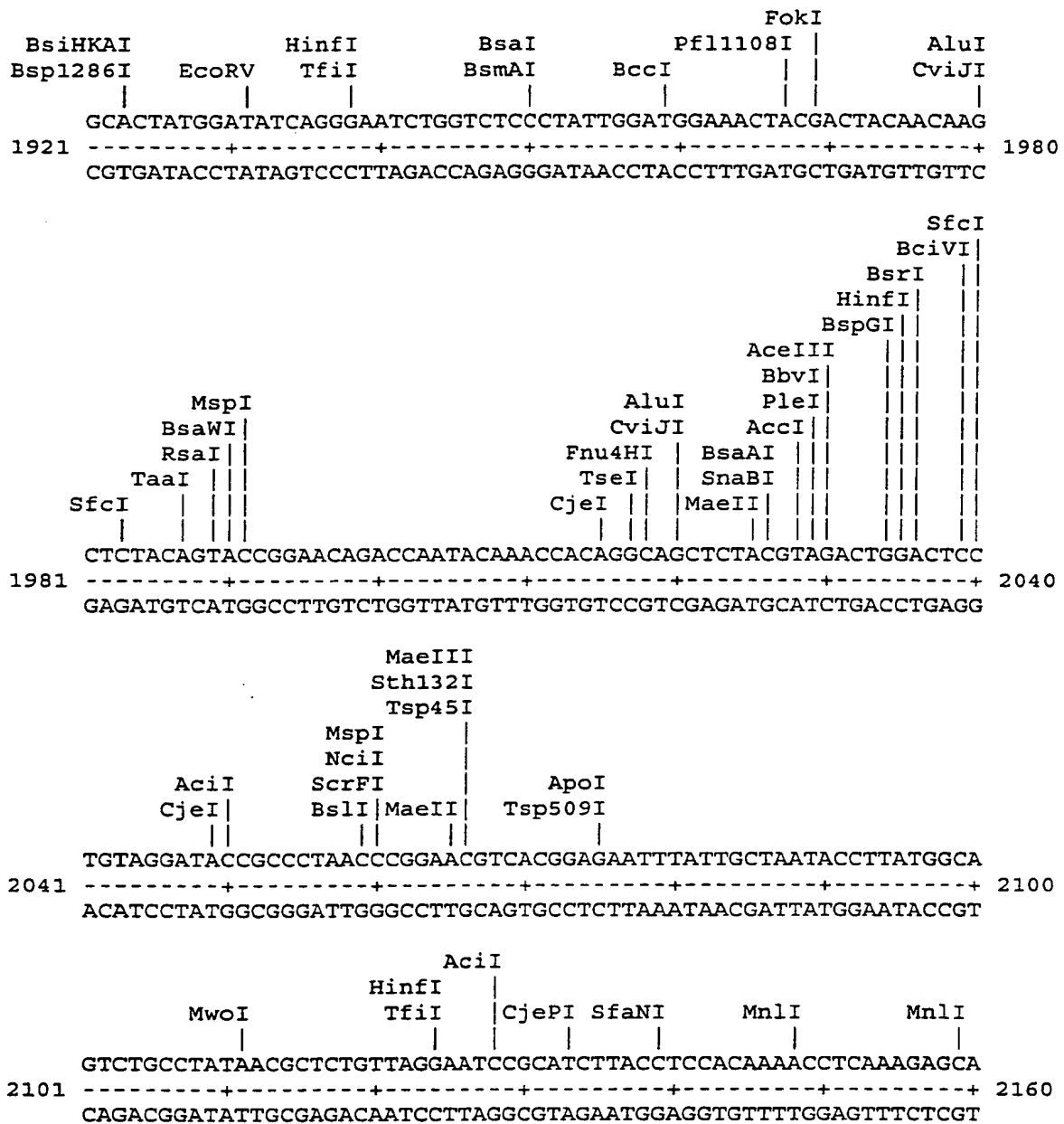
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 AvaII
 EcoO109I
 Psp5II
 Sau96I
 SimI
 Hpy178III
 MboII Eco57I DdeI BseMII
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Hpy188IX
 DpnI
 BglII
 BstYI
 Sau3AI
 DdeI
 AluI
 CviJI
 TaqI
 EcoRV
 BseRI
 MnlI
 BcgI
 BcgI
 TaqI
 MnlI
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CviRI
 MnlI
 MnlI
 MaeIII
 Tsp45I
 ClaI
 TaqI
 BcgI
 HinfI
 NspV
 TaqI
 BcgI
 DdeI
 NlaIII
 CviJI
 ATGTGACTGCAAAAAAATCGATACTTCGAATCTCATTGTAGAAGCCATGAACTTAGATGA
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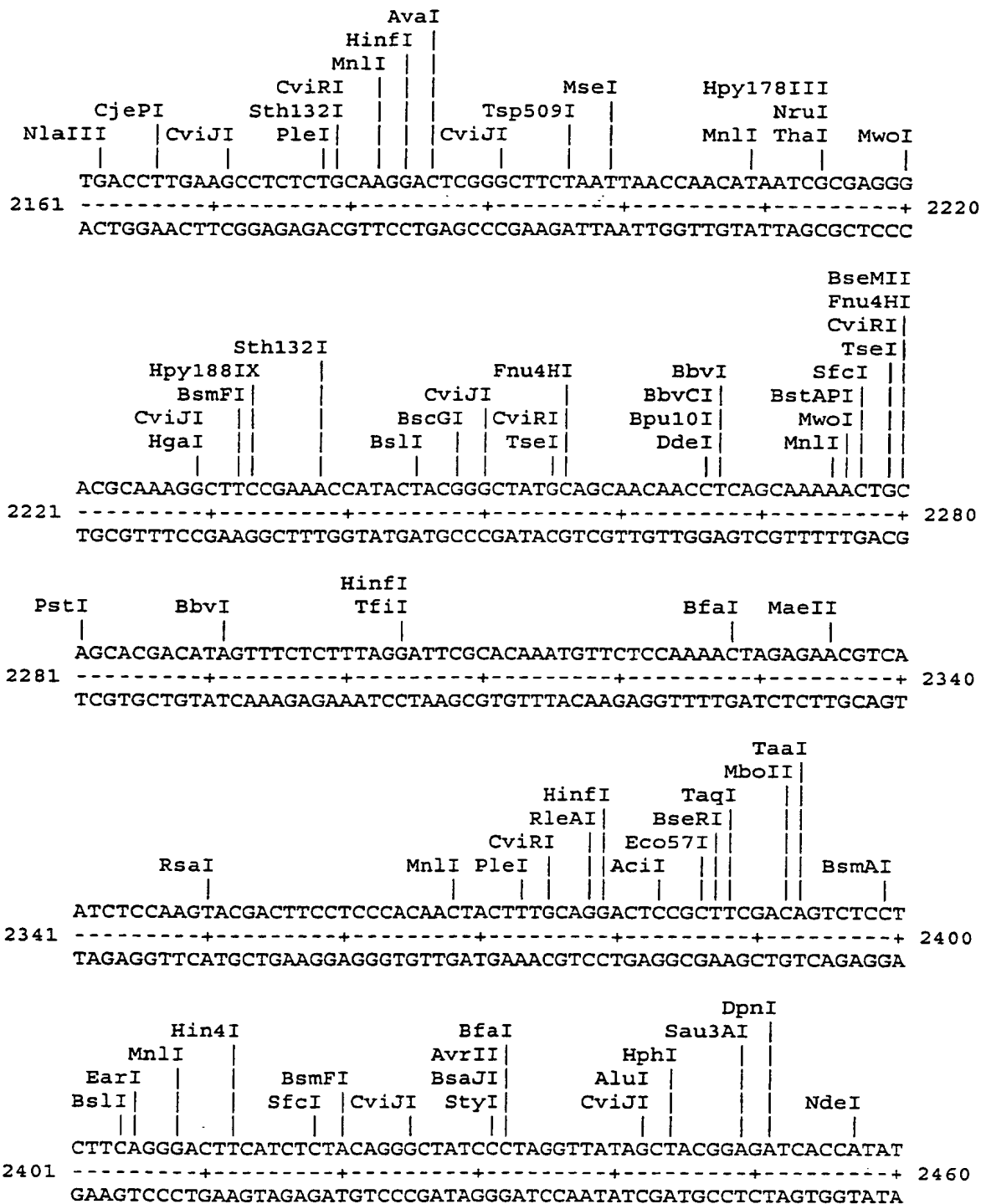
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Figure 9 (continued)



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Figure 9 (continued)



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Figure 9 (continued)

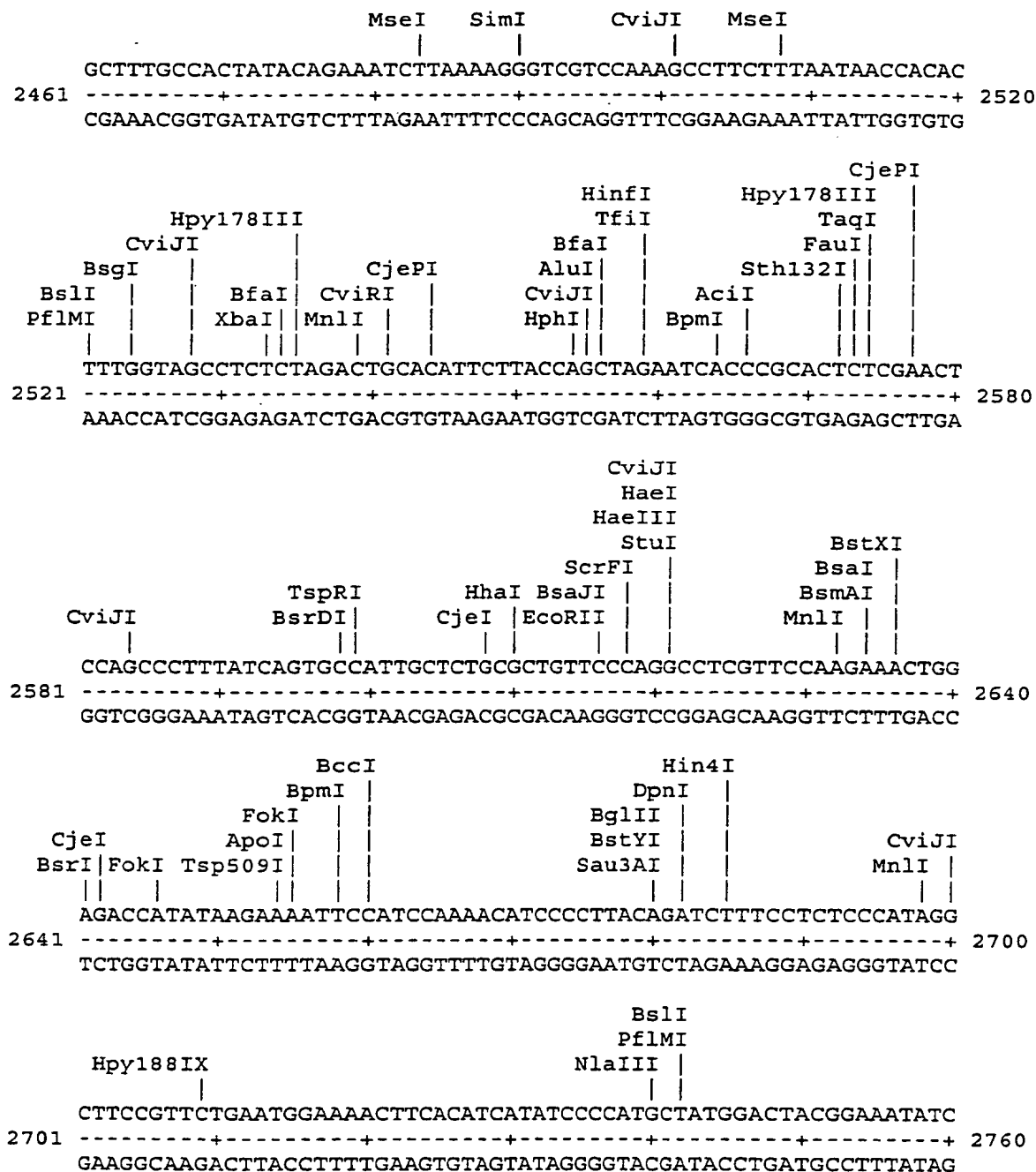
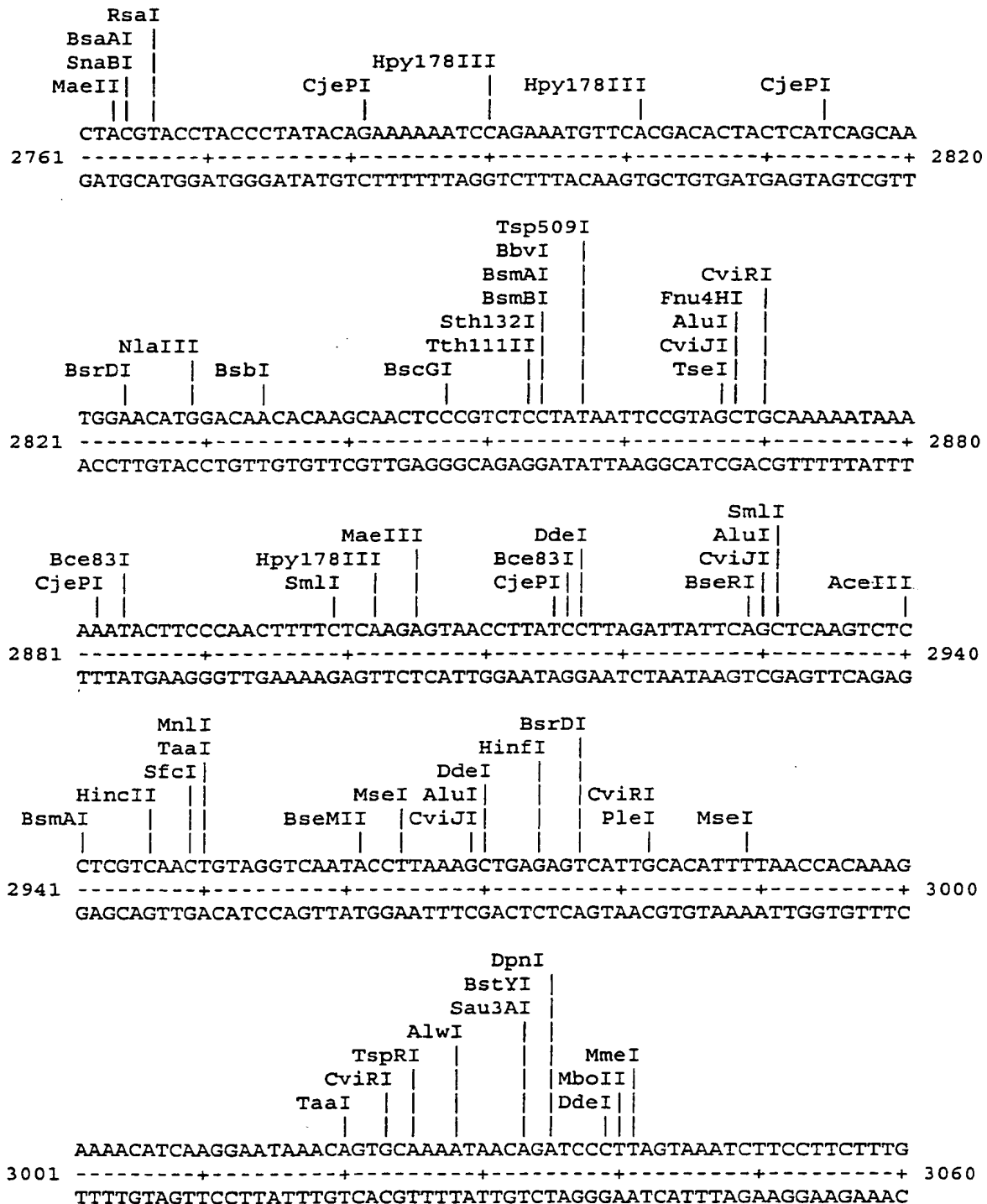


Figure 9 (continued)



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Figure 9 (continued)

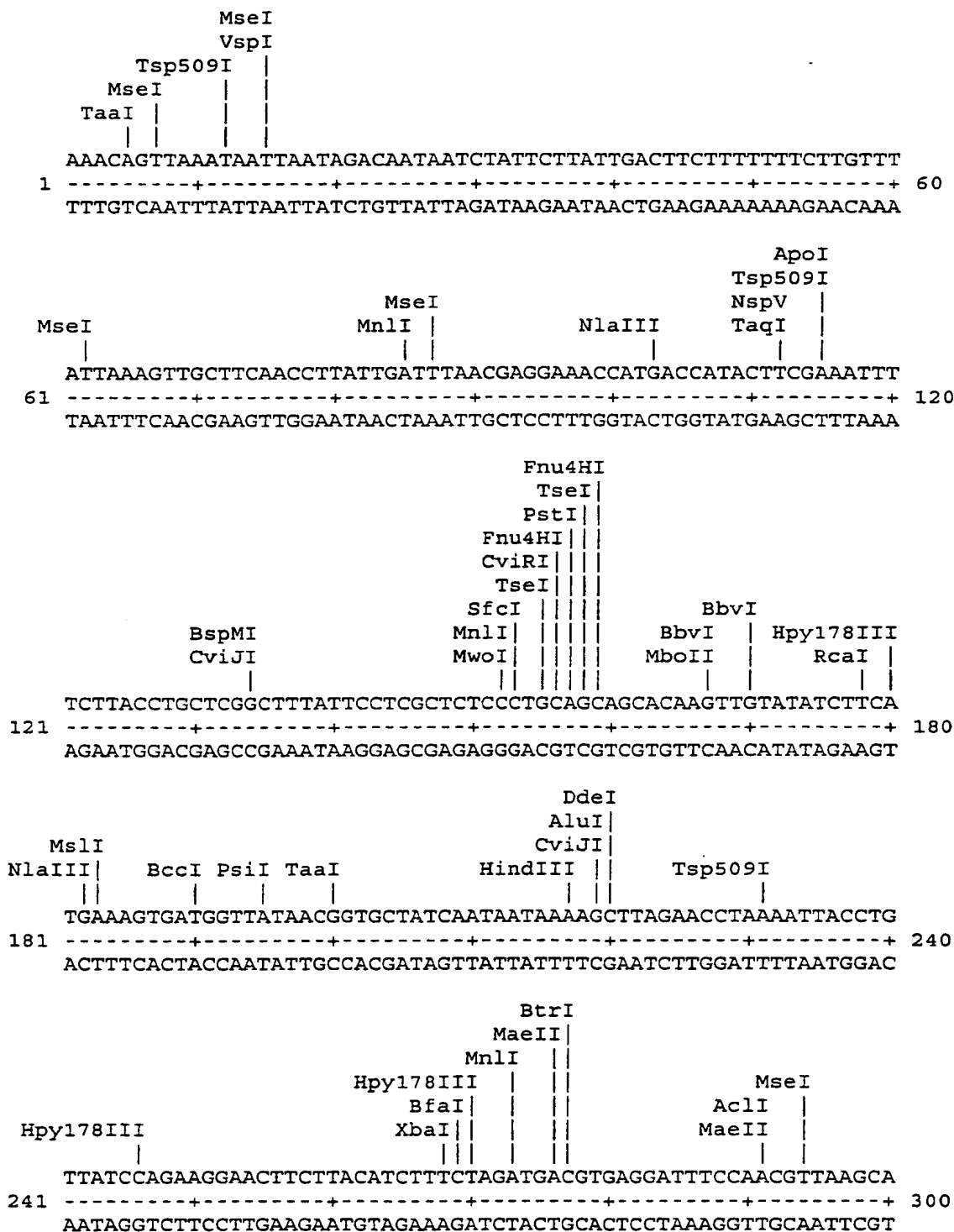
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      MseI |
CviJI |
NcoGV |
NlaIV |
      | |
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-----+-----+-----+----- 3092
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Figure 10

Restriction enzyme analysis of CPN100633 (RY 65 - SEQ ID NO. 10)



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Figure 10 (continued)

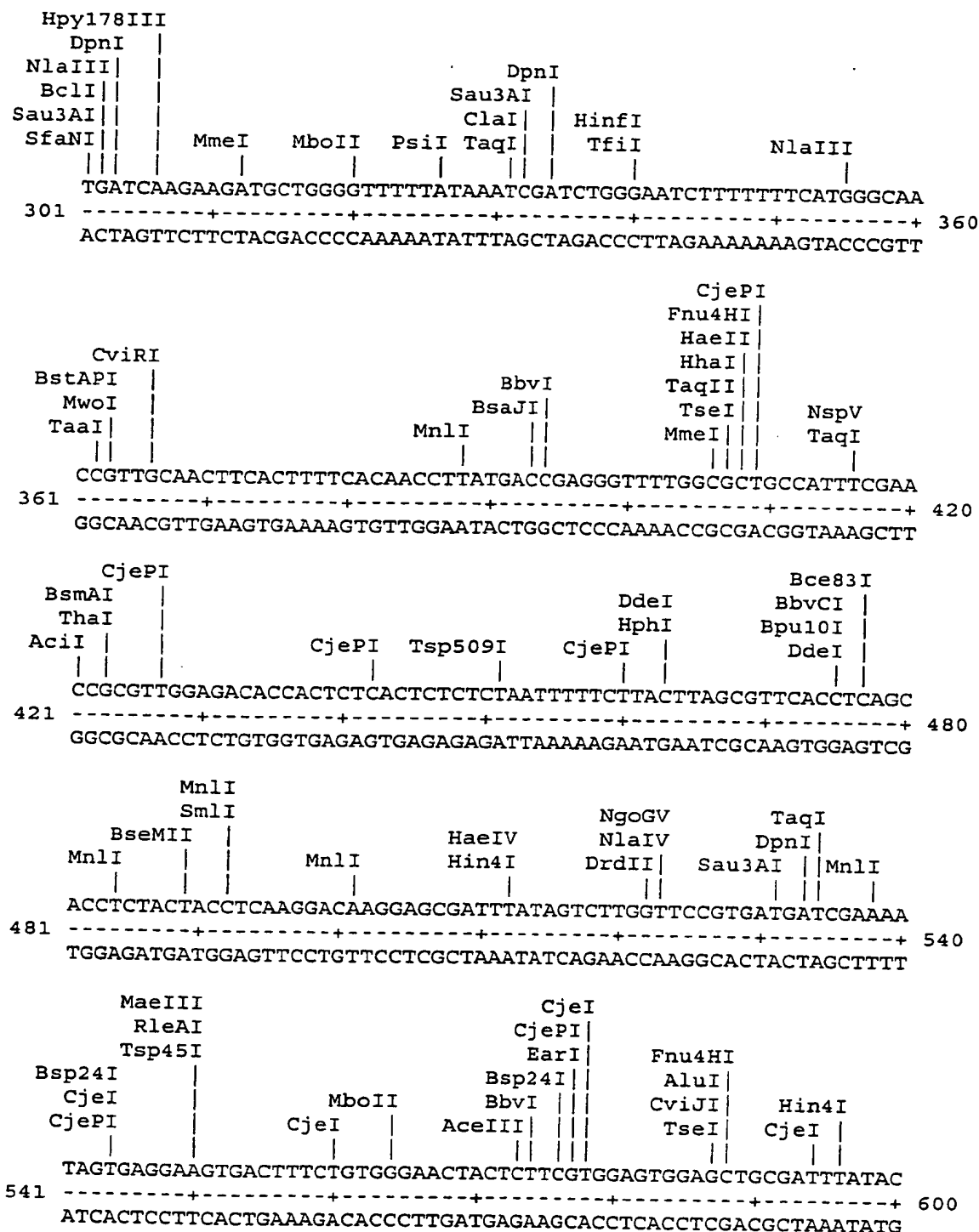
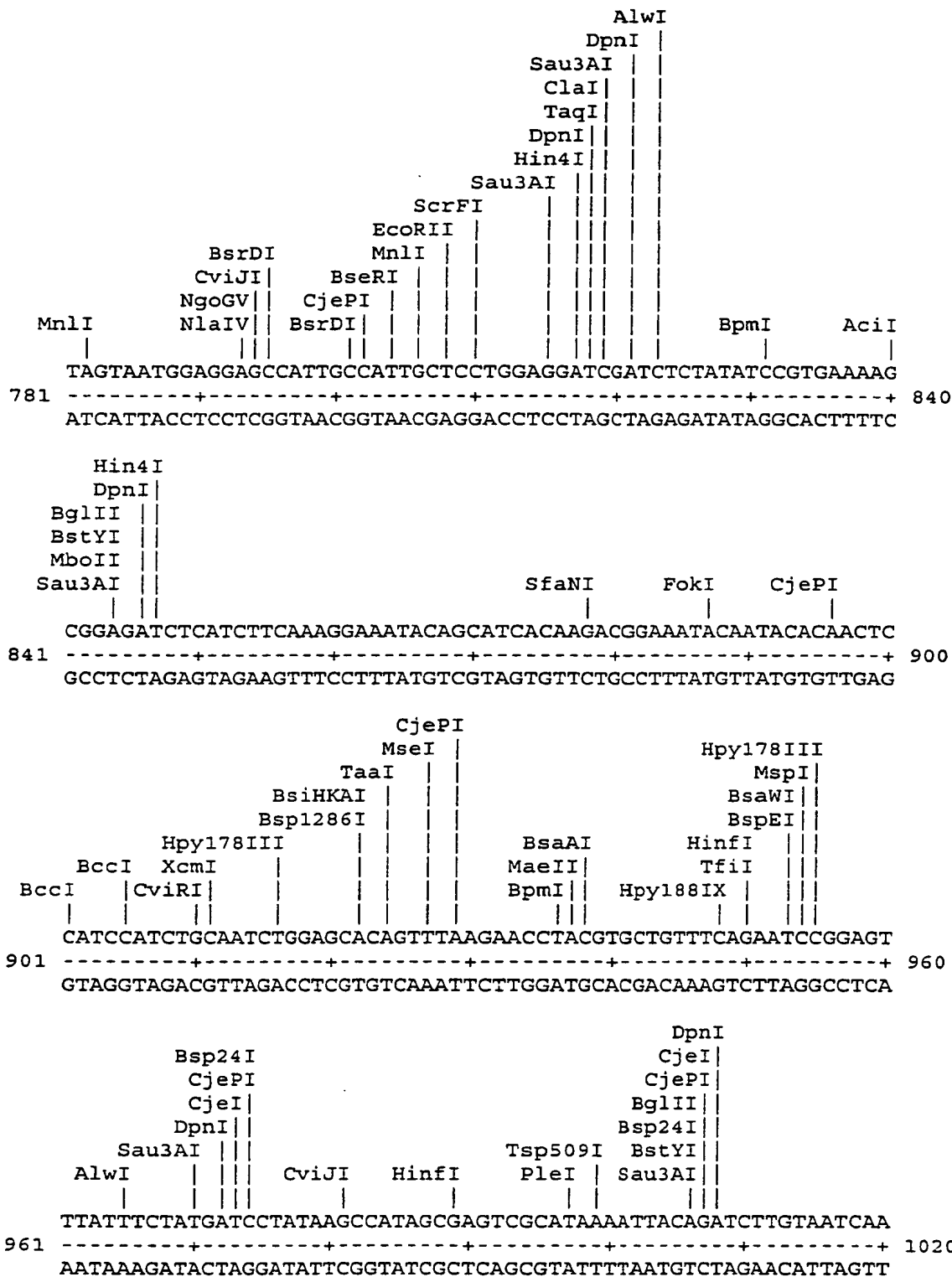


Figure 10 (continued)

The first of these is the *Journal of the American Medical Association* (JAMA), which is the largest and most influential of the medical journals. It is published by the American Medical Association (AMA) and is read by a wide range of medical professionals. The second is the *New England Journal of Medicine* (NEJM), which is also a highly influential journal. It is published by the Massachusetts Medical Society and is read by a wide range of medical professionals. The third is the *Lancet*, which is a British medical journal. It is published by the Lancet Publishing Group and is read by a wide range of medical professionals. The fourth is the *British Medical Journal* (BMJ), which is a British medical journal. It is published by the British Medical Association (BMA) and is read by a wide range of medical professionals. The fifth is the *Annals of Internal Medicine* (AIM), which is a medical journal. It is published by the American College of Physicians (ACP) and is read by a wide range of medical professionals. The sixth is the *Journal of the American Society of Nephrology* (JASN), which is a medical journal. It is published by the American Society of Nephrology (ASN) and is read by a wide range of medical professionals. The seventh is the *Journal of the American Society of Hypertension* (JASH), which is a medical journal. It is published by the American Society of Hypertension (ASH) and is read by a wide range of medical professionals. The eighth is the *Journal of the American Society of Geriatrics* (JAGS), which is a medical journal. It is published by the American Society of Geriatrics (ASG) and is read by a wide range of medical professionals. The ninth is the *Journal of the American Society of Geriatrics* (JAGS), which is a medical journal. It is published by the American Society of Geriatrics (ASG) and is read by a wide range of medical professionals. The tenth is the *Journal of the American Society of Geriatrics* (JAGS), which is a medical journal. It is published by the American Society of Geriatrics (ASG) and is read by a wide range of medical professionals.

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Figure 10 (continued)



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Figure 10 (continued)

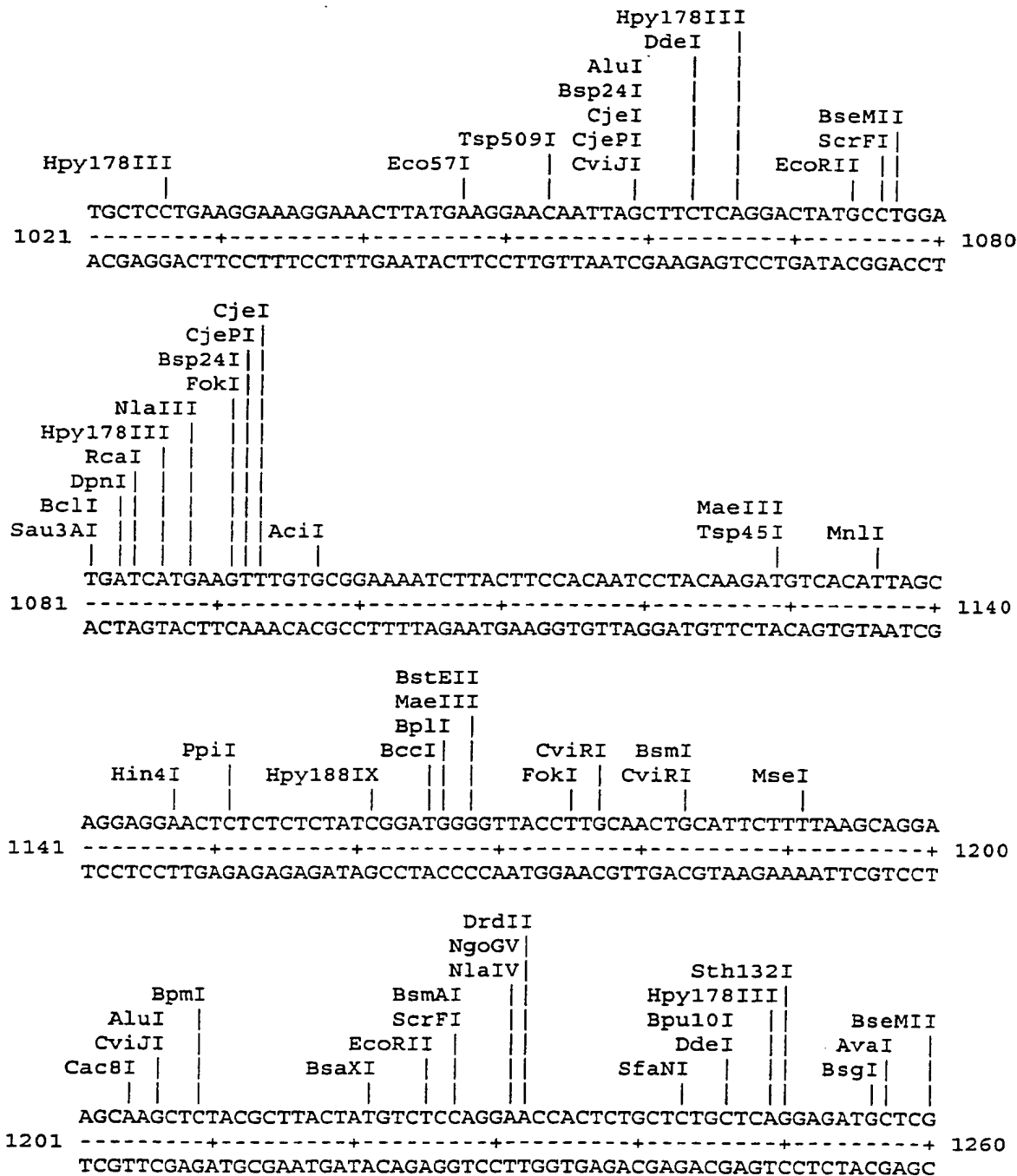
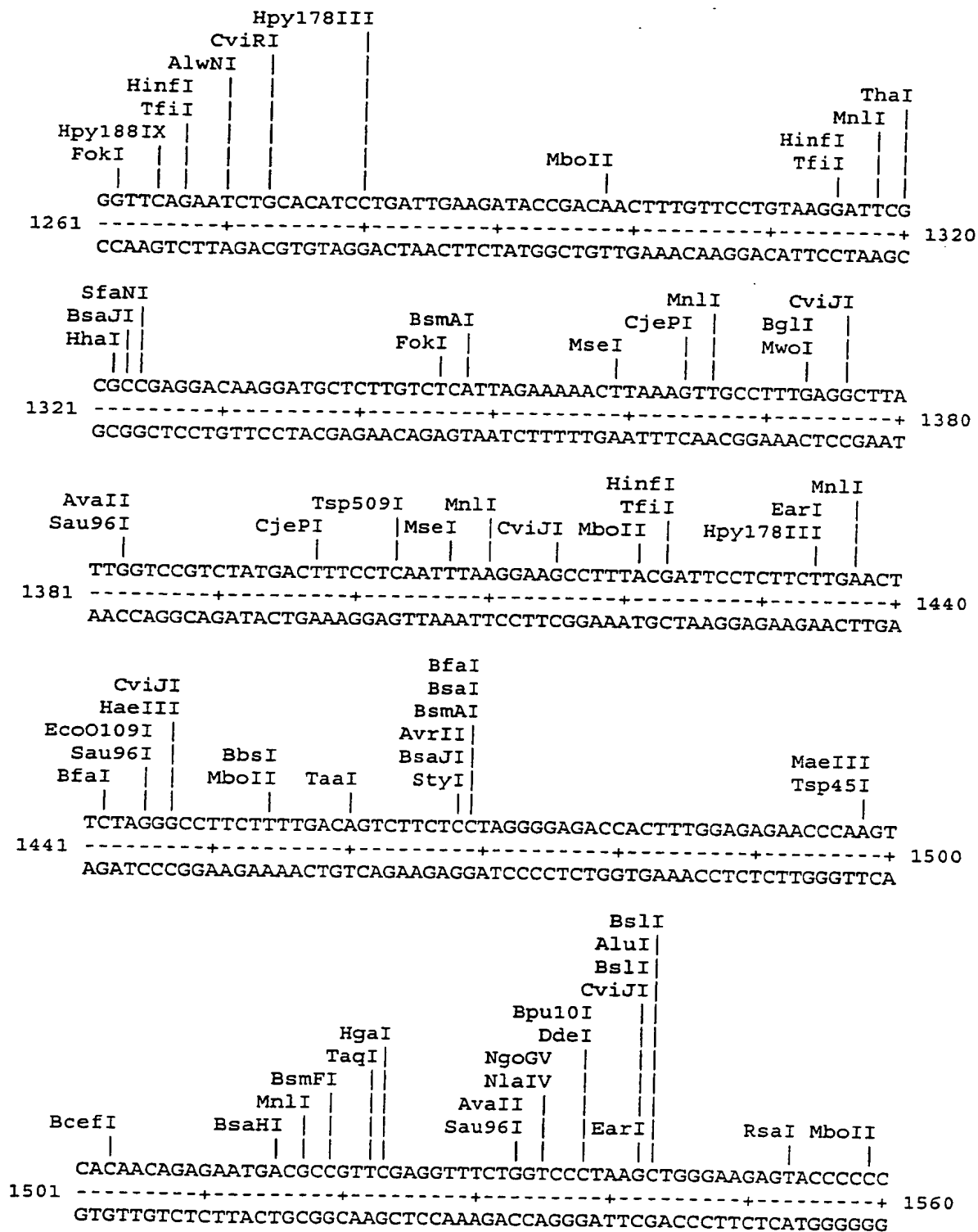


Figure 10 (continued)



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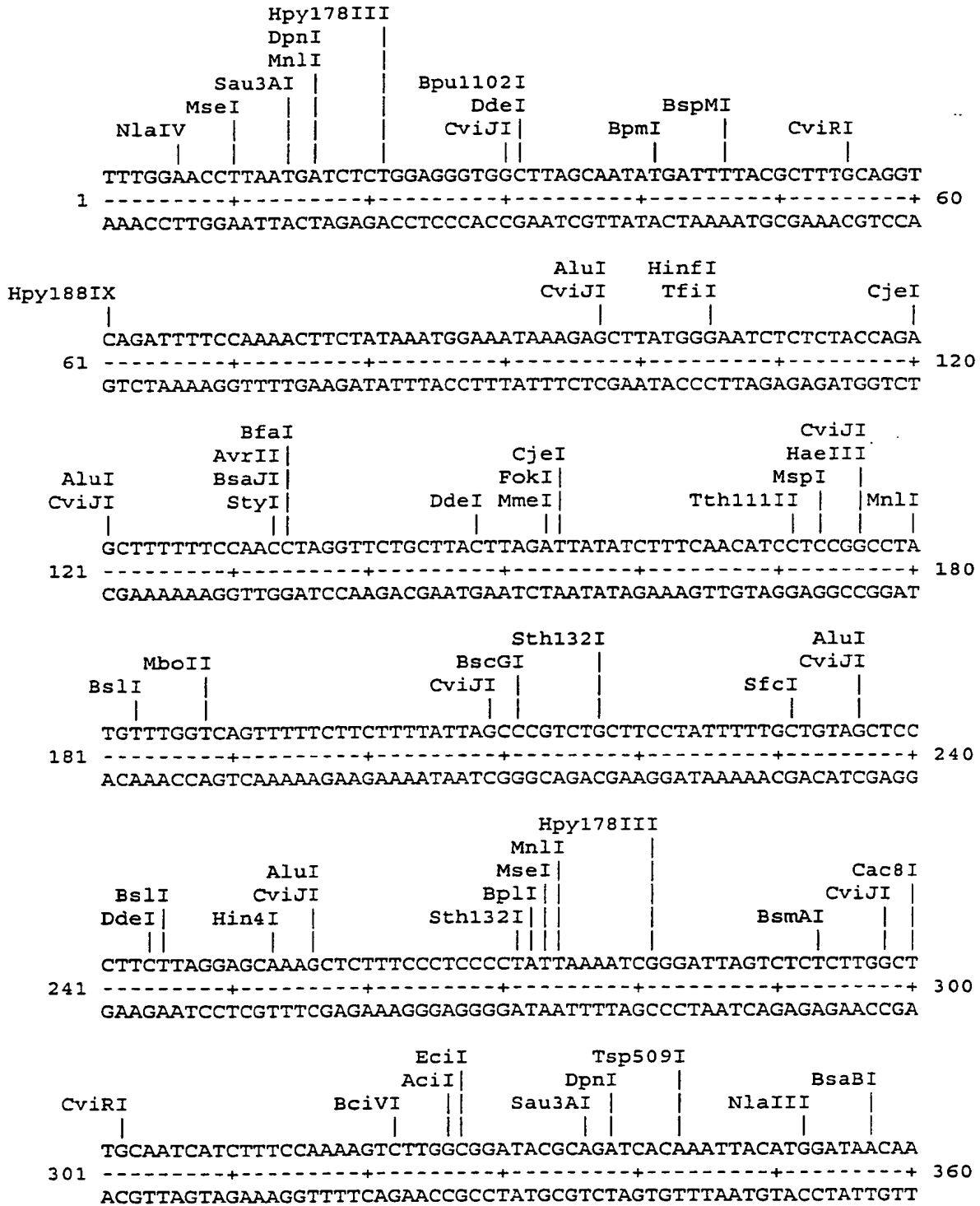
Figure 10 (continued)

Hpy178III
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 AlwI
 DdeI
 TaaI
 BseMII
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 Sau3AI
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 Tsp509I
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 Psp5II
 Sau96I
 MseI
 Hpy188IX
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 Sau96I
 NgoGV
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 Sau96I
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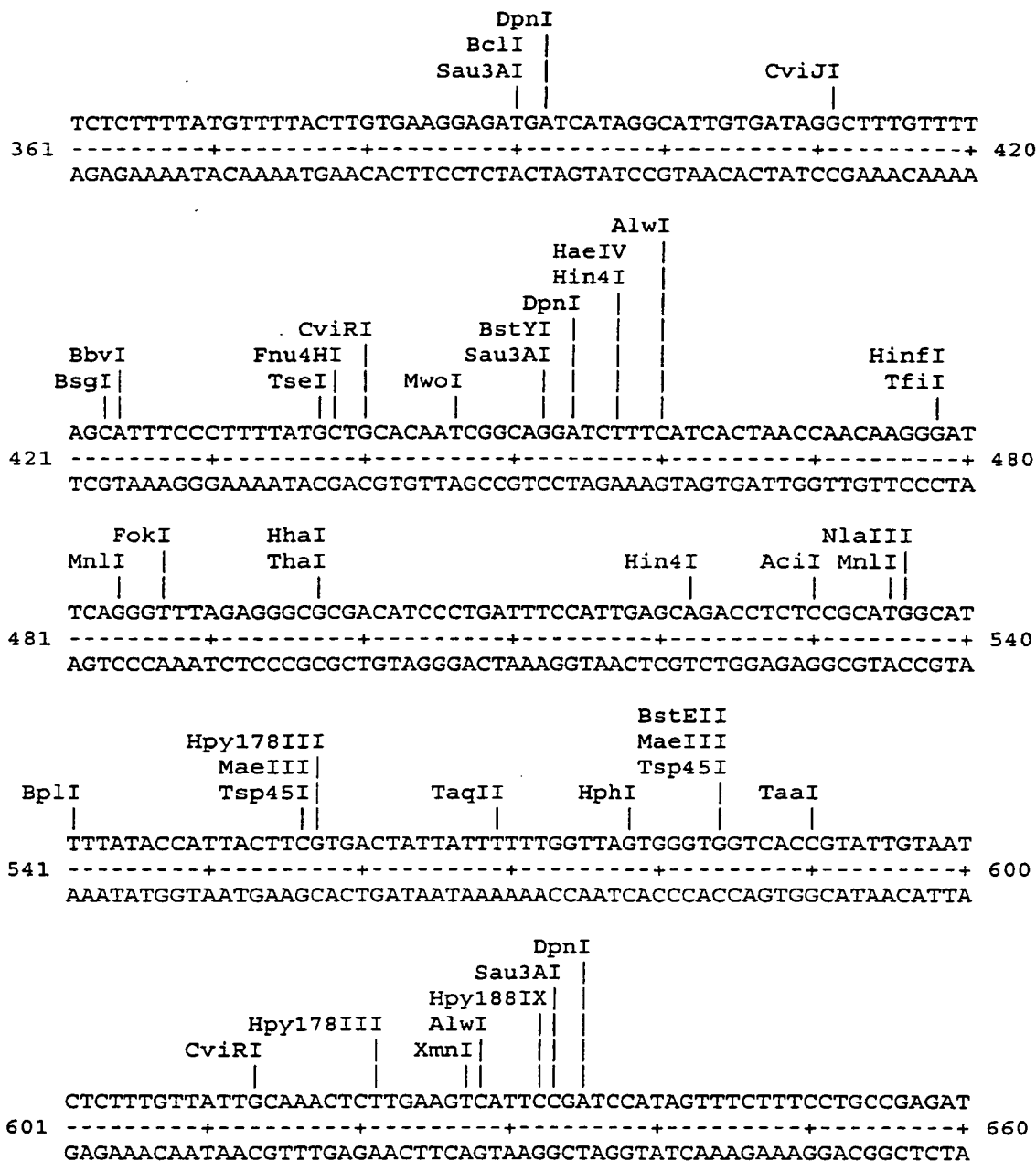
Figure 11

Restriction enzyme analysis of CPN100985 (RY 66 - SEQ ID NO. 11)



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Figure 11 (continued)



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Figure 11 (continued)

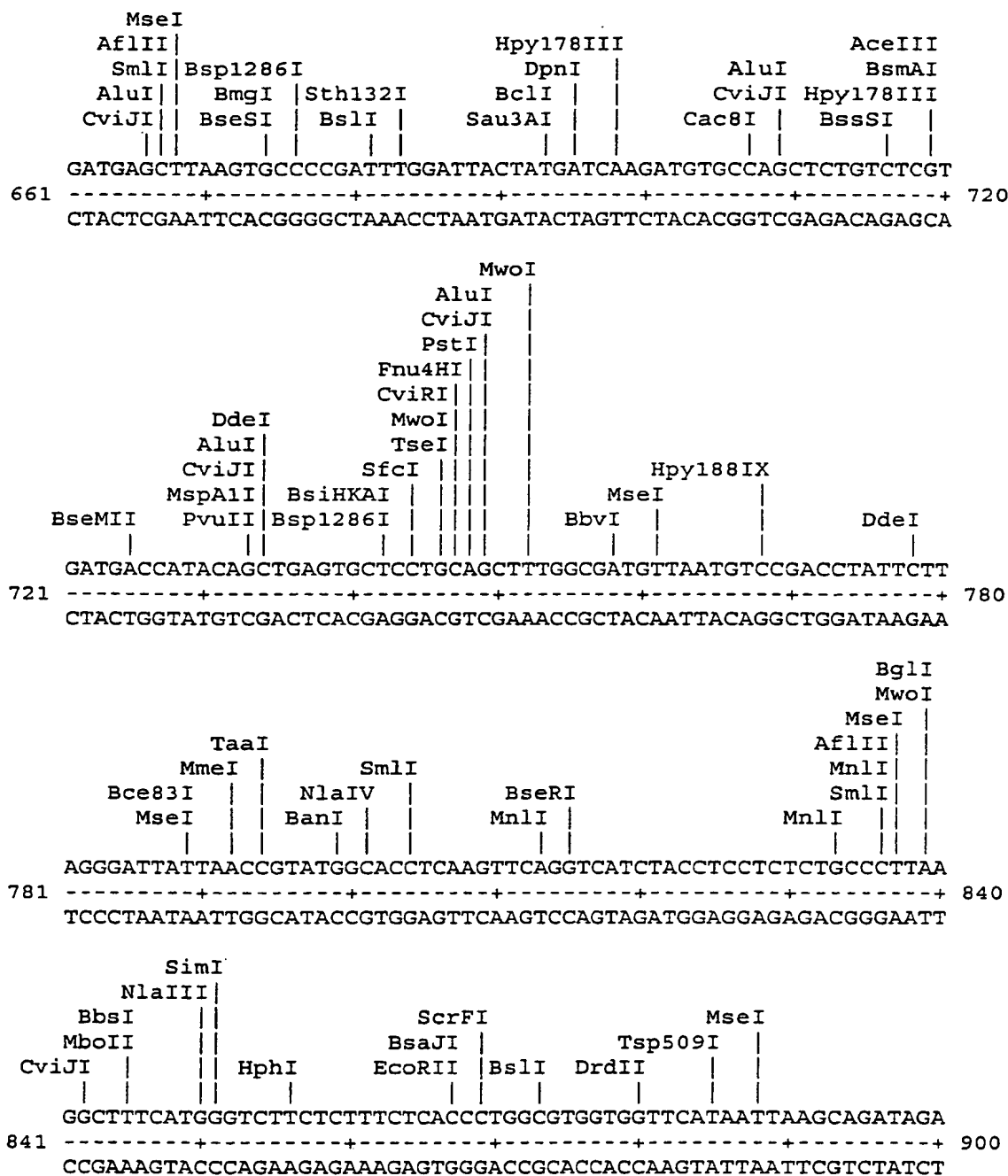
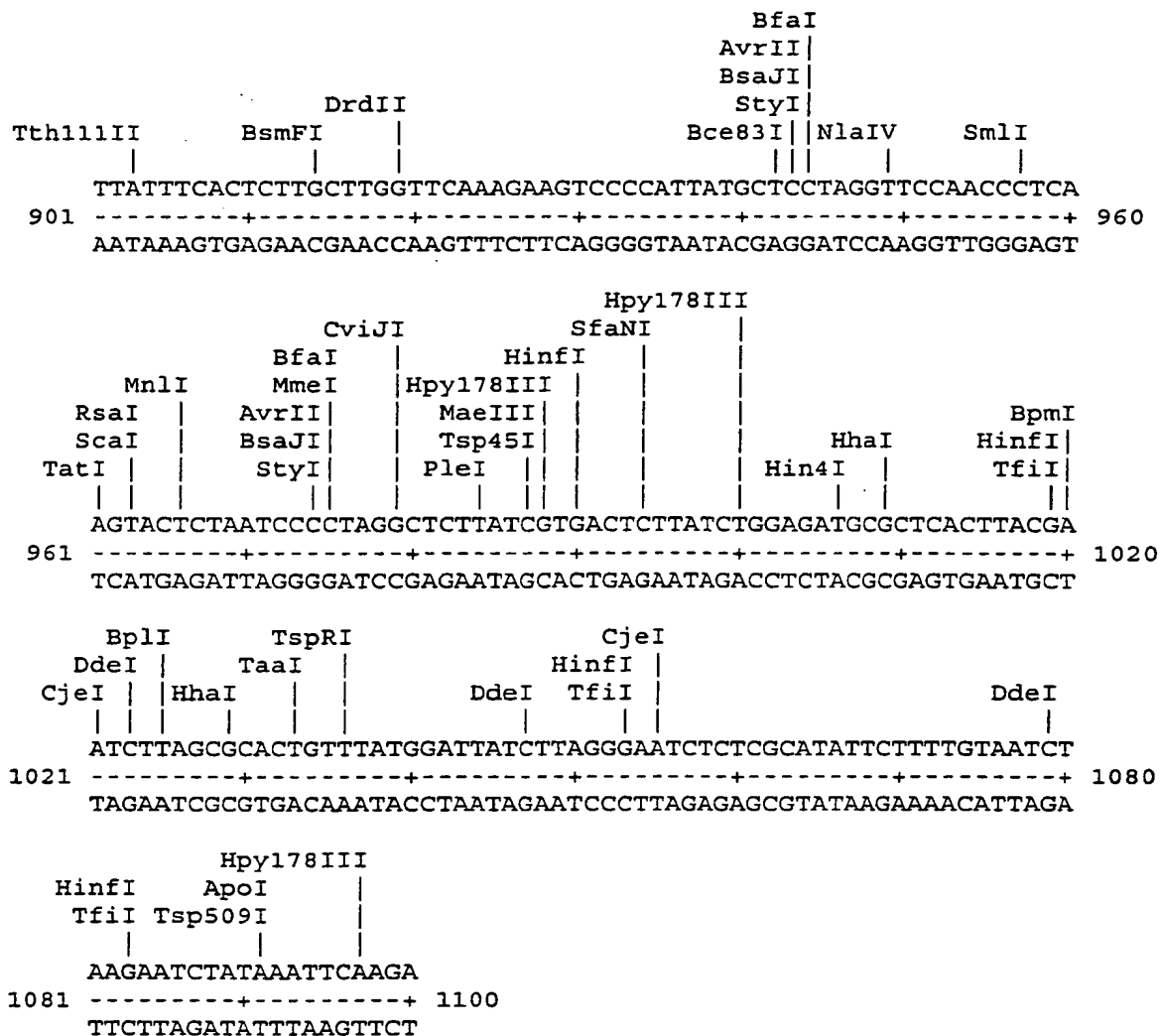


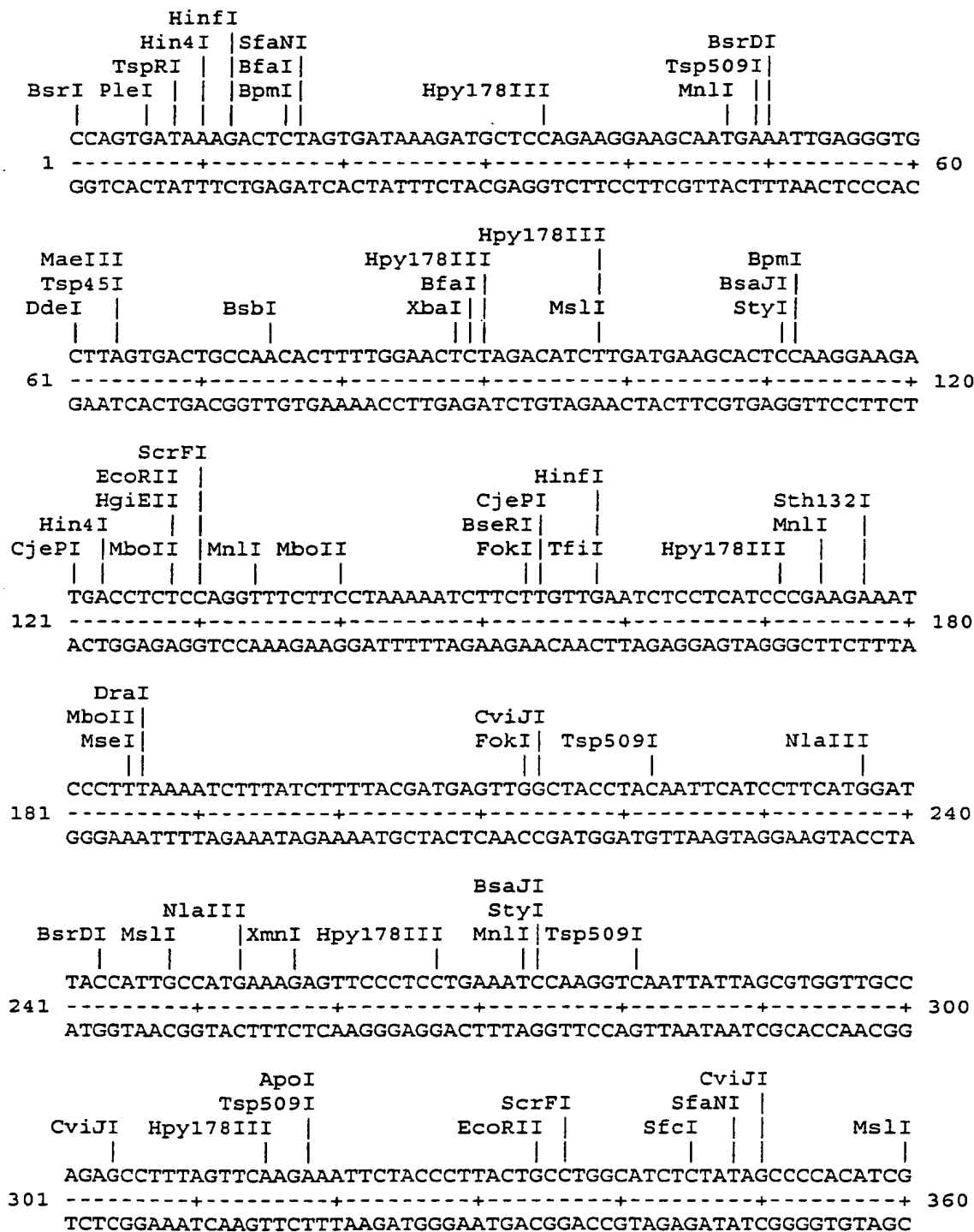
Figure 11 (continued)



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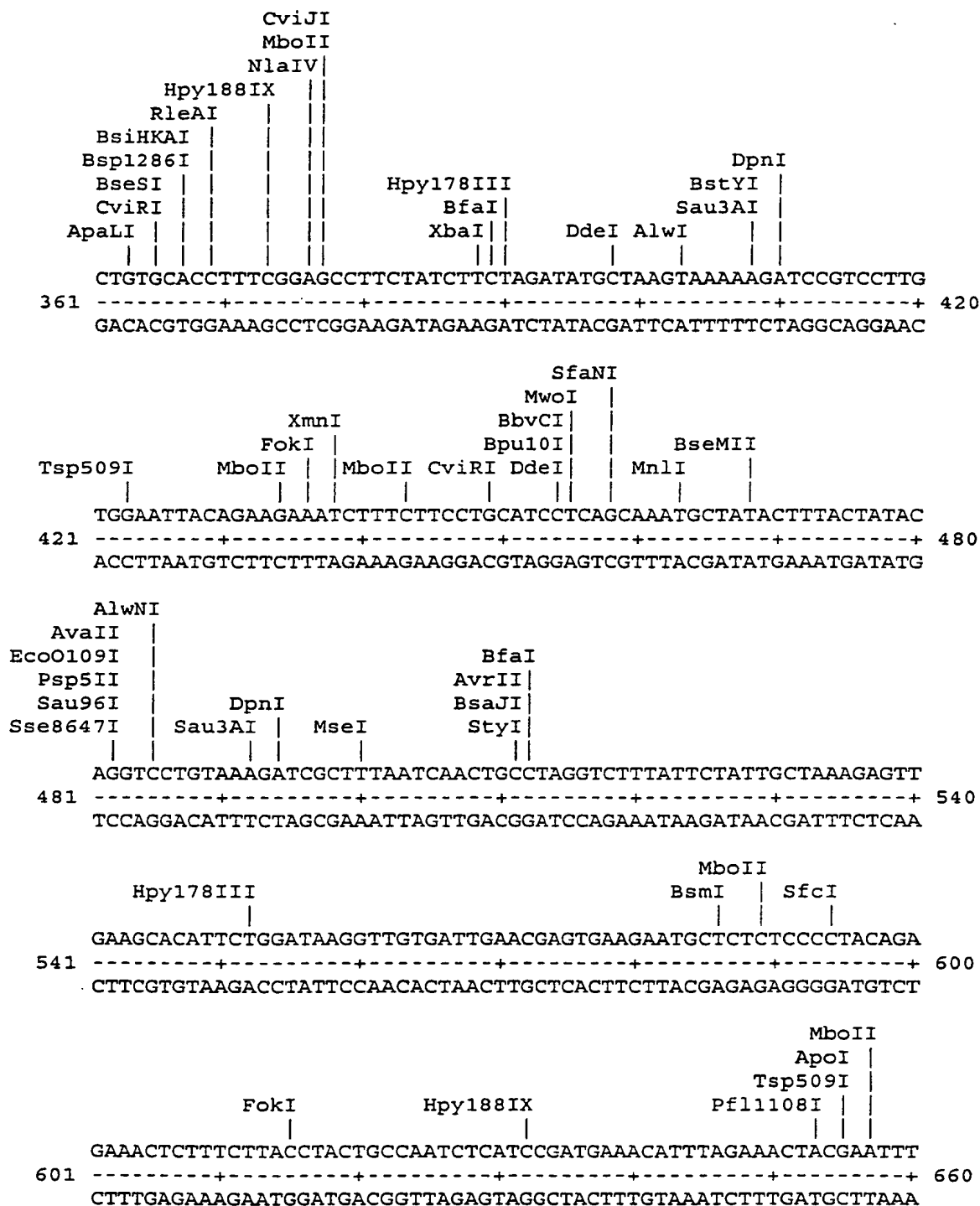
Figure 12

Restriction enzyme analysis of CPN100987 (RY 67 - SEQ ID NO. 12)



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Figure 12 (continued)



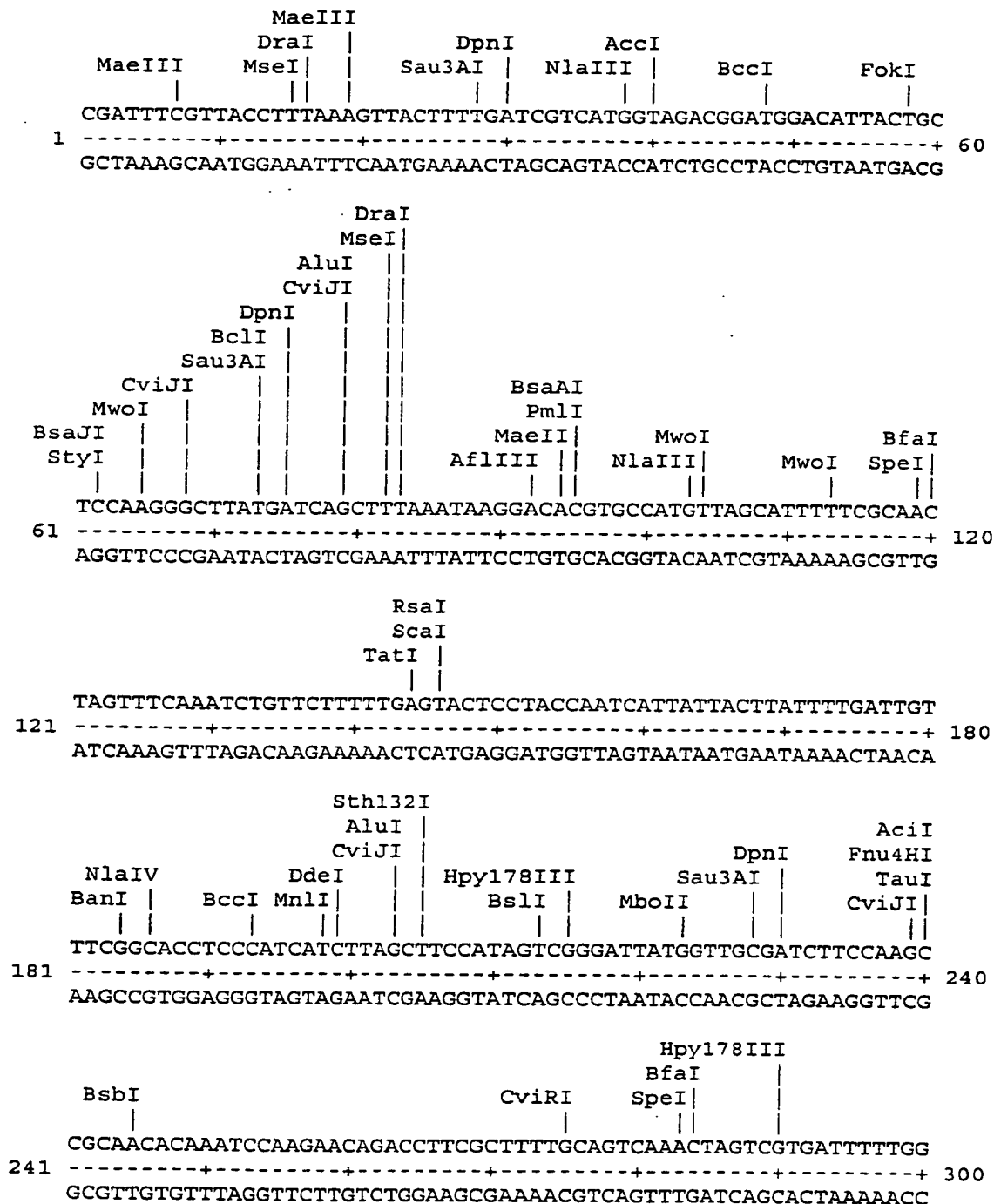
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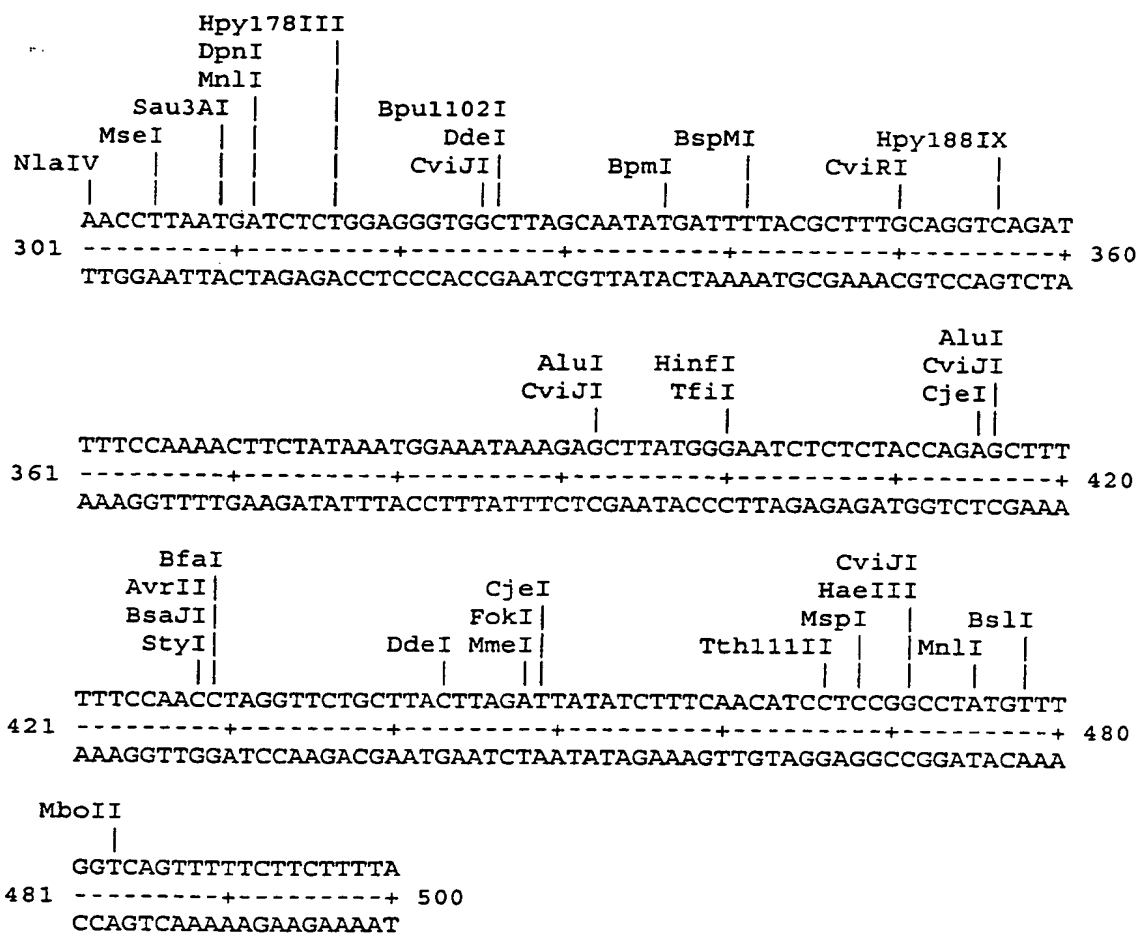
Figure 13

Restriction enzyme analysis of CPN100988 (ry68 - SEQ ID NO. 13)



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Figure 13 (continued)



TTTCTTTT " 2565555555

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Figure 14: Identification of T- and B-cell epitopes from the amino acid sequences SEQ ID No. 14; ORF: cpn100686

```
1 MVSSPILNVP LKNHASVSGK FTHREVSKLA SDLKSGAMSF VPEVLSEETI
51 SSDLGKKQCT QGIISACCGI AMLIVLMSVY YRFGGVIASG AVLLNLLLIW
101 AALQYLDAPL TLSGLAGIVL AMGMAVDANV LVFERIREEF LLSQSLKKS
151 EKGYTAKFGA IFDSNLTTVL ASALLFFLDI GPIKGFALT ILGIFSSMFT
201 ALFMTKFFFM LWMNKTQHTQ LHMMNKFVGI KHDFLRGCKK LWAVSGSVFL
251 LGCVALGFGA WNSVLGMDFK GGYAFTFNP EHGSDVAQM RGKVVKLQE
301 AGLSSRDTRI QTFGSSEKIK IYFSDKALSY TKQIRASLLK LTIMSWRYCG
351 IVVRNRPRFL YGNSKRNAKF WSKVSSKLSK KMRYQATIGL LGALAIILY
401 VSLRFWEQYA FSAVCALIH LLATCAVLFI AHFFLKIKI DLQAIGALMT
451 VLGYSLNNTL IIFDRIREDR QANLFTPMHV LVNDALQKTF SRTVMTTATT
501 LSVLLMLLFI GGSSVFNFAP IMTIGILLGT LSSLYIAPPL LLFMVRKENR
551 SK
```

Possible T cell epitope:

427 VLFIAHFFL

Possible B cell epitope:

465 RIREDRQAN

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Figure 15: Identification of T- and B-cell epitopes from the amino acid sequences SEQ ID No. 15; ORF: cpn100696

1 MSSNLHPVGG TGTGAAAPES VLNIVEEIAA SGSVTAGLQA ITSSPGMVNL
51 LIGWAKTKFI QPIRESKLFQ SRACQITLLV LGILLVVAGL ACMFIFHSQL
101 GANAFWLIIP AAIGLIKLLV TSLCFDEACT SEKLMVFQKW AGVLEDQLDD
151 GILNNSNKIF GHVKTEGNTS RATTPVLNDG RGTPVLSPLV SKIARV

Possible T cell epitope:

133 KLMVFQKWA

Possible B cell epitope:

163: VKTEGNTSRAT

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Figure 16: Identification of T- and B-cell epitopes from the amino acid sequences SEQ ID No. 16; ORF: cpn100709

1 MTIRILAEGL AFRYGSKGPN IIHDVSFSVY DGDFIGIIGP NGGGKSTLTM
51 LILGLLTPTF GSLKTFPSHS AGKQTHSMIG WVPQHFSYDP CFPISVKDVV
101 LSGRLSQLSW HGKYKKKDFE AVDHALDLVG LSDTTTAFH HLGGGQIQRV
151 LLARALASYP EILILDEPTT NIDPDNQORI LSILKKLNRT CTILMVTHDL
201 HHTTNYFNKV FYMNKTLHFI GRHFDLNRPI LLSSYKNQEF SCSPH

Possible T cell epitope:

212 YMNKTLHFI

Possible B cell epitopes:

109 SWHGKYKKKDFE

166 DEPTTNIDPDNQOR

FIGURE 16: 2000-01-01

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Figure 17: Identification of T- and B-cell epitopes from the amino acid sequences SEQ ID No. 17; ORF: cpn100710

1 MHKVIVFIFL TLYSLKSYGN DVIDKPHVLV SIAPYKFLVE QIAEETCFVY
51 AIVTNHYDPH TYELPPQQIK ELRQGDWFR IGEAFGKNLL EKPVMQQVDL
101 SQNVSLIQGK PCCNQHTTNY DTHTWLSPKN LKVQVETIVT TLSKKYPQHA
151 TLYQSNGEKL LLALDQLNEE ILTITSKAKQ RHILVSHGAF GYFCRDYNFS
201 QHTIEKSSHV EPSPKDVARV FRDIEQYKIS SVILLEYSGR RSSAMLADRF
251 HMHTVNLDPY AENVLVNLKT IATTFSSL

Possible T cell epitope:

125 WLSPKNLKV

Possible B cell epitope:

55 NHYDPHTYELPPQQIKELRQGD

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Figure 19: Identification of T- and B-cell epitopes from the amino acid sequences SEQ ID No. 19; ORF: cpn100877

1 MRFSLCGFPL VFSFTLLSVF DTSLSATIS LTPEDSFHGD SQNAERSYNV
 51 QAGDVYSLTG DVSISNVDNS ALNKACFNVT SGSVTFAGNH HGLYFNNISS
 101 GTTKEGAVLC CQDPQATARF SGFSTLSFIQ SPGDIKEQGC LYSKNALMLL
 151 NNYVVRFEQN QSKTKGGAIS GANVTIVGNY DSVSFYQNA TFGGAIHSSG
 201 PLQIAVNQAE IRFAQNTAKN GSGGALYSDG DIDIDQNAYV LFRENEALTT
 251 AIGKGGAVCC LPTSGSSTPV PIVTFSDNKQ LVFERNHSIM GGGAIYARKL
 301 SISSGGPTLF INNISYANSQ NLGGAIAIDT GGEISLSAEK GTITFQGNRT
 351 SLPFLNGIHL LQNAKFLKLQ ARNGYSIEFY DPITSEADGS TQLNINGDPK
 401 NKEYTGTLF SGEKSLANDP RDFKSTIPQN VNLSAGYLV KEGAETVTSK
 451 FTQSPGSHLV LDLGTKLIAS KEDIAITGLA IDIDSLSSSS TAAVIKANTA
 501 NKQISVTDSE ELISPTGNAY EDLRMRNSQT FPLLSLEPGA GGSVTVTAGD
 551 FLPVSPHYGF QGNWKLAWTG TGNKVGEFFW DKINYKPRPE KEGNLVFNIL
 601 WGNADVDRSL MQVQETHASS LQTDRLWID GIGNFFHVSA SEDNIRYRHN
 651 SGGYVLSVNN EITPKHYTSM AFSQLFSRDK DYAVSNNEYR MYLGSYLYQY
 701 TTSLGNIFRY ASRNPVNVVG ILSRRFLQNP LMIFHFLCAY GHATNDMKTD
 751 YANFPMVKNS WRNNCWAIEC GGSMPLLVFE NGRLFQGAIP FMKLQLVYAY
 801 HGDFKETTAD GRRFSNGSLT SISVPLGIRF EKLALSQDVL YDFSFSYIPD
 851 IFRKDPSCEA ALVISGDSWL VPAAHVSRHA FVGSGTGGRYH FNDYTELLCR
 901 GSIECRPHAR NYNINCGSKF RF

Possible T cell epitope:

146 ALMLLNYYV

Possible B cell epitope:

581 DKINYKPRPEKEG

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Figure 20: Identification of T- and B-cell epitopes from the amino acid sequences SEQ ID No. 20; ORF: CPN100325

1 MPSSWKRLQ VLSHKIAATE SGGGIYAKDI QLQALPGSFT ITDNKVETSL
51 TTSTNLYGGG IYSSGAVTLT NISGTFGITG NSVINTATSQ DADIQGGGIY
101 ATTSLSINQC NTPILFSNNS AATKKTSTTK QIAGGAIFSA AVTIENNSQP
151 IIFLNNSAKS EATTAATAGN KDSCGGAIAA NSVTLTNPE ITFKGNYAET
201 GGAIGCIDLT NGSPPRKVS I ADNGSVLFQD NSALNRGGAI YGETIDISRT
251 GATFIGNSSK HDGSAICCST ALTLAPNSQL IFENNKVTET TATTKASINN
301 LGAAIYGNNE TSDVTISLSA ENGSIFFKNN LCTATNKYCS IAGNVKFTAI
351 EASAGKAISF YDAVNVPPKK QLLKS

Possible T cell epitope:

226 VLFQDNSAL

Possible B cell epitope:

257 NSSKHDG

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Figure 21: Identification of T- and B-cell epitopes from the amino acid sequences SEQ ID No. 21; ORF: CPN100368

1 MKYSLPWLLT SSALVFSLHP LMAANTDLSS SDNYENGSSG SAAFTAKETS
 51 DASGTTYTLT SDVSITNVSA ITPADKSCFT NTGGALSFGV ADHSLVLQTI
 101 ALTHDGAAIN NTNTALSFSG FSSLLIDSAP ATGTSGGKGA ICVTNTEGGT
 151 ATFTDNASVT LQKNTSEKDG AAVSAYSIDL AKTTTAALLD QNTSTKNGGA
 201 LCSTANTTVQ GNSGTVTFSS NTATDKGGGI YSKEKDSTLD ANTGVVTFKS
 251 NTAKTGGAWS SDDNLALTGN TQVLFQENKT TGSAAQANNP EGCGGAICCY
 301 LATATDKTGL AISQNQEMSF TSNTTTANGG AIYATKCTLD GNTTLTFDQN
 351 TATAGCGGAI YTETEDFSLK GSTGTVTFST NTAKTGALY SKGNSSLTGN
 401 TNLLFSGNKA TGPSNSSANQ EGCGGAILAF IDSGSVSDKT GLSIANNQEV
 451 SLTSNAATVS GGAIYATKCT LTGNGSLTFD GNTAGTSGGA IYTETEDFTL
 501 TGSTGTVTFS TNTAKTGGA YSKGNNSLSG NTNLLFSGNK ATGPSNSSAN
 551 QEGCGGAILS FLESASVSTK KGLWIEDNEN VLSGNTATV SGGAIYATKC
 601 ALHGNTTLTF DGNTAETAGG AIYTETEDFT LTGSTGTVTF STNTAKTAGA
 651 LHTKGNTSFT KNKALVFSGN SATATATTTT DQEGCGGAIL CNISESDIAT
 701 KSLTLTENES LSPINNTAKR SGGGIYAPKC VISGSESINF DGNTAETSGG
 751 AIYSKNLSIT ANGPVSFTNN SGGKGGAIYI ADSGELSLEA IDGDITFSGN
 801 RATEGTSTPN SIHLGARGKI TKLAAAPGHT IYFYDPITME APASGGTIEE
 851 LVINPVVKAI VPPPQPKNGP I

Possible T cell epitope:

7 WLLTSSALV

Possible B cell epitopes:

162 QKNTSEKDG
 538 GNKATGPSNSSANQEG

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Figure 22: Identification of T- and B-cell epitopes from the amino acid sequences SEQ ID No. 22; ORF: CPN100624

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1 MTNSIFISKF GCLCDPFVSA FYPTALCCSL SGNEVPNLAS CQMSRKDISA
51 FHTSPSFRLN VTPEPLVSSF RPSNLLNGFG HDITQDITIT GNSINSVIDY
101 NYHYEDGGIL ACKNLFISEN KGNLSFERN SSSGGALYS VRECWISKNO
151 NYSFISNAAS LATTTTSGFG GAIHALDSYI TNNLGEGQFL DNVSKNRGGA
201 IYVGVSLSIT DNLGPIVIK NQTLEDSSFG GGIFCRAVNI ERNYQNIQIN
251 DNASGQGVVY FLPLGVIIS NKEIIIEISN SASSINTASG KLYPGGGGIM
301 CTSLSHENNP KGLIFNNKTA ALSGGVYTRD LSSSKITVRT AFINNSATSG
351 GALINLSGIG STPONFFLSA DYGDILFNNN TITSSSPQPG YRNALYAAPG
401 INLKLGARQG YKILFYDPID HDQTTTDP IV FNYEPHHLGT VLFSGINVDS
451 NATNPLNFLS KFSNSSRLER GVLAIEDRAA ISCKTSLQTG GILRLGNAAL
501 IRTKGPSSSI NFNAIAINLP SILOSEASAP KFWIYPTLTG STYSEDTSST
551 ITLSGPLTFL NDENENPYDS LDLSEPRKDI PPPLPPRCDC KKIDTSNLIV
601 EAMNLDEHYG YQGIWSPYWM ETTTTTSSTV PEQTNTNHRQ LYVDWTPVGY
651 RPNPERHGEF IANTLWQSAY NALLGIRILP PQNLKEHDLE ASLQGLGLLI
701 NQHNREGRKG FRNHTTG YAA TTS AKTAARH SFSLGFAQMF SKTRERQSPS
751 TTSSHNYFAG LRFDSLLFRD FISTGLSLGY SYGDHMLCH YTEILKGSSK
801 AFFNNHTLVA SLDCTFLPAR ITRTLELQPF ISAIALRCSQ ASFQETGDHI
851 RKFHFKHPLT DLSSPIGFRS EWKTSHHIPM LWTTEISYVP TLYRKNPEMF
901 TTLLISNGTW TQATPVSYN SVAARIKNTS QLFSRVTL SL DYSAQVSSST
951 VGQYLKAESH CTF

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Possible T cell epitope:

640 QLYVDWTPV

Possible B cell epitopes:

701 NQHNREGRKGFRNHTTG

741 SKTRERQSPSTTSSHNY

93/96

Figure 23: Identification of T- and B-cell epitopes from the amino acid sequences SEQ ID No. 23; ORF: CPN100633

1 MTILRNFLTCL SALFLALPAA AQVVYLHESD GYNGAINNKS LEPKITCYPE
51 GTSYIFLDDV RISNVKHDQE DAGVFINRSG NLFFMGNRCN FTFHNLMTG
101 FGAAISNRVG DTTLTLSNFS YLAFTSAPLL PQGQGAISL GSVMIENCEE
151 VTFCGNYSSW SGAAIYTPYL LGSKASRPSV NLSGNRYLVF RDNVSQVYGG
201 AISTHNLTLT TRGPSCFENN HAYHDVNSNG GAIAIAPGGS ISISVKSGDL
251 IFKGNTASQD GNTIHNSIHL QSGAQFKNLR AVSESGVYFY DPISHSESHK
301 ITDLVINAPE GKETYEGTIS FSGLCLDDHE VCAENLTSTI LQDVTLAGGT
351 LSLSDGVTLO LHSFKQEASS TLTMSPGTTL LCSGDARVQN LHILIEDTDN
401 FVPVRIRAEK KDALVSLEKL KVAFEAYWSV YDFPQFKEAF TIPLLELLGP
451 SFDSLILLGET TLERTQVTE NDAVRGFWSL SWEEYPPSLD KDRRITPTKK
501 TVFLTWNPEI TSTP

Possible T cell epitope:

640 QLYVDWTPV

Possible B cell epitope:

482 WEEYPPSLDKDRRITPTKK

94/96

Figure 24: Identification of T- and B-cell epitopes from the amino acid sequences SEQ ID No. 24; ORF: cpn100985

1 MGISLPELFS NLGSAYLDYI FQHPPAYVWS VFLLLLARLL PIFAVAPFLG
51 AKLFPSPIKI GISLSWLAI I FPKVLADTQI TNYMDNNLFY VLLVKEMIIG
101 IVIGFVLAFP FYAAQSAGSF ITNQGGIOGL EGATSLISIE QTSPHGILYH
151 YFVTIIFWL V GGHRIVISLL LQTLEVIPIH SFFPAEMMSL SAPIWITMIK
201 MCQLCLVMTI QLSAPAALAM LMSDLFLGII NRMAPQVQVI YLLSALKAFM
251 GLLFLT LAW W FIIKQIDYFT LAWFKEVPIM LLGSNPQVL

Possible T cell epitope:

83 YMDNNLFYV

Possible B cell epitope:

78 TQITNYMDNN

09/868987 1001

95/96

Figure 25: Identification of T- and B-cell epitopes from the amino acid sequences SEQ ID No. 25; ORF: cpn100987

1 MKHSKEDDLS RFLPKNLLVE SPHP EEIPLK SLSFTMSWLP TIHPSWITIA
51 MKEFPPEIQG QLLAWLPEPL VQEILPLLPG ISIAPHRCAP FGAFYLLDML
101 SKKIRPCGIT EEIFLPASSA NAILYTG PV KIALINCLGL YSI AKELKHI
151 LDKVVI ERVK NALSPTEKLF LTYCQSHPMK HLETTN FLSS WTTDAELRQF
201 VHKQGLEFLG KALTKENASF LWYFLRRLDV GRAYIVEQTL KTWYDHPYVD
251 YFKSRLEQCM KVLVK

Possible T cell epitope:

220 FLWYFLRRL

Possible B cell epitope:

1 MKHSKEDDLSR

005987 1004

96/96

Figure 26: Identification of T- and B-cell epitopes from the amino acid sequences SEQ ID No. 26; ORF: cpn100988

1 MLAFFATSEFK SVLFEYSYQS LLLILIVSAP PIILASIVGI MVAIFQAATQ
51 IQEQTFAFAV KLVVIFGTLM ISGGWLSNMI LRFAGQIFQN FYKWK

Possible T cell epitope:

21 LLLILIVSA

Possible B cell epitope:

89 QNFKYKWK

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